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Case of a Solution of Continuity in the Parietal Bones, not consequent to external Injury; by GEORGE HARGROVE, Member of the Royal College of Surgeons, London, and Assistant Surgeon in the Royal Artillery.

WILLIAM SMYTH, a Sergeant in the Artillery, aged thirty-eight years, is a married man, and the father of two or three fine children; he is apparently delicate, but this I attribute to the existence of the affection; in other respects he enjoys a sound and healthy constitution. After investigating the history of his health from the earliest years, exclusive of his appearance at present, I have been unable to ascertain any symptom that would indicate a tendency to the scrophulous habit, nor have I any reason to believe he has suffered from a syphilitic affection, to which I could impute the production of the extraordinary effects now apparent.

About seven years since he was first attacked with a wandering pain of his head, which, agreeably to his account, set in with a degree of violence scarcely possible to conceive. It was accompanied by a large, soft, and puffy tumour, which subsided and rose again at different intervals, shifting its situation from one temple to the other, and from the forehead to the summit and back part of the head. He describes it as having been of a stinging and lancinating nature; and what appears remarkable, he found no alleviation from his sufferings, except when he stooped forward, resting his head on his hands; and when in this incumbent position, a sudden accession of lethargic stupor uniformly produced a suspension from pain. At times, however, a slight remission occurred; and during one, of a more permanent description, he was ordered to proceed on duty to Malta, where he quickly regained his health and spirits, and pursued his military avocations for two years, with the same effect he had done

done before he had been seized with the affection of his head. He was now ordered to return to England, in the usual routine of duty, and had only been about two months at Portsmouth, when the pain and tumours came on in a most distressing manner. After a stay of some months at the latter place, during which he had a miserable existence, he was ordered to Guernsey, while in one of his temporary remissions of pain, and shortly recovered, so as to enjoy perfect health in this island for five years, at the expiration of which time he was again ordered home, and the complaint returned with such severity, as to be unequalled by any former attack.

A circumstance particularly worthy of observation is, that since the first accession of those extraordinary pains, he had never been in better health than when on foreign service, nor did he ever suffer more than when, for any length of time, in his native country, which the preceding paragraph sufficiently corroborates.

About the beginning of June, 1809, the pains and tumours became unusually troublesome, so much so, that if he wore his regimental cap even for a few minutes, one continued tumefaction surrounded the edge of it. He informed me, that shortly before this period he fell suddenly, from an universal dizziness that affected him, but received no hurt or accident by the fall, nor any that he could call to his recollection from his earliest years. In June, a painful phlegmonous tumour, about the size of a small walnut, arose over the middle of the sagittal suture, which suppurated, and burst with a very small opening; this gave exit to a trivial discharge, but was not succeeded by an abatement of his pain. It was now deemed expedient to dilate the opening, when a large collection of pus, of an apparently good consistence, was discharged. In a few days after, slight exfoliations were observed to come off piecemeal, to the great surprise of the medical gentlemen attending him, until at length the dura mater was laid bare. This membrane was found to have receded from its attachment to the cranium for the extent of half an inch around the aperture.

The man now first began to express his sense of amendment, and shortly after mentioned that he felt complete relief from his pains. This opening is situated precisely over the great longitudinal sinus, and is now about an inch in circumference. Another matter of surprise is, that it has been discharging ever since, without remission, generally to the extent of about two wine glasses in twenty-four

four hours, but at present is reduced to one. At this moment I observe the motion of the brain pumping off (if I may use the phrase) a quantity of purulent matter of a yellow colour and thin consistence. I have observed an osseous matter filling up the aperture, but it is perforated, and seems to give way for the discharge. The dura mater does not appear disposed to throw up that peculiar fungus so often observed after applications of the trephine, nor to suffer in the least from its frequent unavoidable exposure; the edges of the integuments around the opening are inverted, and do not seem disposed to close over the aperture. During the exfoliation of the bones, the man sunk into a state of debility from the quantity of pus hourly secreted and evacuated; he got better, however, from the use of bark and exercise; these, indeed, have been the only means he has made use of for the recovery of his health. He does not suffer the least pain or inconvenience from the opening, or from the application of a sponge or cloth; and it is simply defended from the influence of the atmosphere by a compress of lint and a piece of flannel. This man is an out-patient, and generally visits the Hospital twice or thrice a week.

I should have mentioned, that another tumour lately appeared over the frontal bone; it has been opened, and discharged a quantity of thick pus. The part is not painful, and the chances are, I fear, that it will terminate in a state perhaps similar to the other, although it has not been attended with inflammatory symptoms to any thing near the same extent.

REMARKS.

This curious affection, in my mind, bears a more striking analogy to Necrosis, than to any other disease I have heard of; indeed, many of the symptoms the man labored under, were those of that disease; but still the consideration of other attendant circumstances induces me to adopt a different opinion, although those circumstances may ultimately prove destitute of a source sufficiently plausible to account for them. I am led to imagine that the effect produced has been the operation of Nature, for the purpose of giving exit to some offending quality that existed, I suspect, within the cranium, which was evidently productive of the most serious consequences, considerably affecting the functions of the brain. This was manifest from the man's sufferings prior to the formation of the opening in the bones. But here I am at a loss to account

for the absence of other concomitant symptoms usually present on such occasions; however, the continual state of distracting pain the man had been in; the complete cessation of it on the opening being formed by *spontaneous* exfoliations; and his being totally free from this pain for those last eight or nine months *while in England*, during which time it has been throwing off such an immense quantity of purulent matter; together with the remarkable fact of the pain being changed for a state of stupor and sleep, as long as the head was placed in that position most favourable for the diffusion of a preternatural fluid, if such did exist,—are severally, events that strongly incline me to adhere to the last Supposition, in preference to any other which my short experience could adduce, or my imagination is capable of suggesting.

The case, however involved in obscurity, is an instance in addition to numberless others, elucidating the wonderful powers of Nature for the completion of her designs: for, we observe that a considerable portion of the highly requisite defence and support of that important organ the brain, is, in toto, removed, and even from its peculiarly strong adhesion to the dura mater along the course of the suture, and over the longitudinal sinus, most certainly for some great cause, which the instantaneous change in the man's health plainly evinces; thus producing an effect which has occupied the attention of authors and practitioners since the existence of the records of Surgery, when the result of external injury.

Should I, at a future period, have an opportunity of ascertaining the final issue of this case, I shall feel happy in forwarding the communication.

Royal Artillery Hospital, Woolwich,
March 18, 1810.

Cases of Hydrothorax, by Dr. Maclean.*

I Had hitherto prescribed the digitalis only in an irregular and casual way, and my success was not such as to encourage farther trials. But often observing no sensible effect

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* The analysis of Dr. Maclean's Work on hydrothorax, given by our Reviewer, in the last Number, is so concise, that we think it necessary, in justice to the merit of the Author, as well as to enable our Readers to form a judgment of the propriety and success of his mode of treating this formidable disease, to lay before them two or three of his cases. Ed.

fect either good or bad from what I had reason to believe were full doses of it, I began to suspect the quality of the preparations that were used. Accordingly, about this time I took some pains to procure the herb genuine, and began to cultivate it in my own garden. The result I have every reason to be satisfied with; indeed it has exceeded my most sanguine expectations. The fortunate issue of the following case, the first that occurred afterwards, induced me to pay still further attention to its preparation and exhibition.

CASE XII.

March 12, 1796.—Mrs. E. æt. 40, the mother of several children; of a constitution naturally delicate, and much weakened by the cares and fatigue of a large family. Has occasionally consulted me for three years back, for complaints which indicated great weakness and irritability of the heart and lungs, having been subject to quick, hurried, and difficult respiration, attended frequently with palpitation, or *fluttering*, as she termed it, of the heart, increased on bodily exertion or emotion of mind. Of this date I find the following memorandum in my case-book: "Symptoms of hydrops pectoris." A blister was directed to be applied to the chest, and some expectorant and diuretic medicines were prescribed, which soon removed her complaints.

June 23, 1798.—I find her again on my report book, with the same symptoms, for which similar remedies were prescribed.

July 13.—No relief from the last medicines. In every respect worse. Respiration very much interrupted, especially on motion, or on lying down in bed. Pulse quick, feeble, and extremely irregular; urine very small in quantity, and high coloured, with sediment; ankles and legs œdematous. Supposes herself in the fifth month of pregnancy; and there is every reason to suspect the fœtus has been dead for a fortnight, in which period her complaints have made very rapid progress. Has for some months suffered great mental anxiety and uneasiness, from causes unnecessary to state here; to which her present illness is to be attributed.

℞. Dig. purp. fol. nostr. pulv. gr. j. Confect. arom. q. s. ft. pilul. nocte maneq. cum mistur. infra præs. coch. No. ij. s.

℞. Fol. dig. purp. incis. ʒj. Infunde in aq. ferv. ℥viij. per hor. iv. dein cola.

 ℞. Infus

℞. Infus. colat, ℥v. Spt. juniper c. ℥ß. Spt. æth. nitr. Spt. æth. vitr. c. sing. ʒij. M.

Particular injunctions were given to discontinue the Foxglove as soon as it produced any of its unpleasant effects.

July 17.—I heard no more of her till the evening of this date, when my immediate attendance was desired. I found her retching violently, and bringing up at times a dark coloured matter, like coffee grounds; the extremities cold; the pulse extremely small, fluttering, and irregular; had frequent faintings, or, to use the language of those about her, "they could not keep life in her;" and the body was covered with cold sweats. She had been in this state for several hours: the cause of these alarming symptoms was sufficiently obvious. On inquiry, I found she had experienced immediate relief from the medicines; that the quantity of urine was very much increased; the swellings nearly gone, and that she was considered as mending very rapidly till this morning, when the stomach began to be disordered. I found also that she had been under the influence of the Foxglove nearly two days; yet, in direct contradiction to the directions rigidly enjoined, she was desired to continue it this morning! it was in vain that relief was attempted through the medium of the stomach; for every thing liquid, even in the smallest quantity, was immediately rejected. By an anodyne glyster, warm anodyne embrocations rubbed into the epigastrium, abdomen, and feet, small pills of solid opium with confect. aromat. all the urgent symptoms subsided in a few hours, and I had the pleasure of leaving my patient in the morning quiet and composed.

She continued gradually to mend from this time till about a fortnight after, when she miscarried of a fœtus which bore evident marks of having been dead at the time she apprehended. The water now began to accumulate in the chest and legs with unusual rapidity, and with it all her former distressing symptoms returned.—But although her strength was nearly exhausted, the water was speedily evacuated by the same means; and by a combination of tonics with diuretics, she was restored to health in a few weeks.—She has had no return of the dropsical symptoms, but has had occasional attacks of her former complaints, and always received advantage from medicine. On the whole, her health has been of late years improved.

In every point of view this case will appear interesting: an amiable woman has been rescued from a very alarming

state,

state, by a remedy which, by the most flagrant inattention, had nearly proved her destruction.*

The result of this case impressed on my mind so favorable an opinion of the foxglove, that I determined to direct my attention more than ever to it: from this period it has always formed a part of my remedy in dropsy; and my failures hitherto having been as much owing to the quality of the herb used, as to my ignorance of the proper dose and mode of exhibition, I furnished the practitioner with whom it was prescribed with a portion of the leaves out of my own garden. Having been absent from Britain when Withering's excellent work was published, and for some years afterwards, I had not the good fortune of seeing it at this time, and of borrowing light from so safe a guide.

CASE XXXIV.

March 30.—Mr. Partridge, of Bures, ætat. 49. nephew of the subject of case 17. Extreme difficulty in respiration, increased on the least motion, or on talking, attended for the most part with a peculiar wheezing noise. Has great tightness or sense of stricture and oppression across the chest. P. irregular, feeble, and frequent; it may be called a quick succession of weak irregular vibrations. Urine very scanty, high coloured, with a copious pink coloured sediment. Has been obliged to sleep in a chair for a fortnight, in consequence of which his legs, especially the left, are much swelled, and pitting on pressure. A small degree of tumefaction of the abdomen also. Whole face, especially the lips and nose, of a livid hue. Eyes dull, heavy, and expressive of great suffering; the conjunctiva somewhat yellow. Very little thirst. Appetite much impaired, as is his general strength. Was taken ill three weeks since with nearly all these symptoms, which have gradually increased since; of late very rapidly.

Has taken no medicine except a powder the 28th, which purged him violently, and a spermaceti mixture, his disorder

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* Dr. M. has in this work pointed out with great accuracy, the dose of this poweful remedy, together with the most effectual mode of preparation and exhibition. He agrees with Darwin and others in prefering the infusion when the leaves of the plant have been recently dryed and preserved according to his directions.

In London practice, however, we think his tincture, which is kept at Apothecaries Hall, and by all the Chemists, a more certain preparation, as we cannot depend on the keeping of the leaves or powder in town, with the same confidence. The dose of the tincture is fifteen to thirty drops ter die. See our Journal, Vol. II. p. 123.

order having been considered as gout, to which he has been subject, both in a regular and irregular way, from eight years of age, and which appears to be hereditary. The gouty paroxysms have at times been very severe, and the leg now principally swelled has suffered the most. Has lived temperately. No cough.

Appl. empl. canth. pectori.

℞. Dig. purp. fol. p. nostr. gr. viij. Zing. p. gr. vi. Conf. arom. q. s. ft. boli viij. Sumt. 1. sing. noct. et mat.

℞. Bals. tolut. ℈ij. Muc. g. arab. ʒij Mannæ ℥ß. tere simul. aq. menth. pip. ℥vjß. Sp. æth. vitr. c. sp. æth. nitrosi aa. ʒiij. M. sumt. coch. tria 6tis. horis.

April 4.—Immediate relief from the blister; and in the course of the following day, the 31st ult. the urine began to flow in increased quantity, but still high coloured with sediment, and he was able to lie down in bed. On the morning of the 1st, had five loose watery stools; but nevertheless the urine continued to increase considerably, and became perfectly natural in appearance: in the course of the day the swelling of the legs was nearly subsided, when it began to lessen, in the morning, he complained of very acute pains in them. Breathing now perfectly free; yet he still complains of some tightness across the chest. P. much more regular. Water since last night less in quantity, and deposits a sediment, but he has drank less. Countenance greatly improved; appetite perfectly restored; and he sleeps as usual in bed. No sensible effect from the digitalis except in increasing the flow of urine, and once on the bowels. The weather so intensely cold that he is prevented from going out and deriving advantage from air and exercise.

Appl. empl. e cymino inter scapulas, et empl. canth. ad pect. si urget dyspnœa, nec non.

℞. Dig. p. p. gr. xij. Zing. p. gr. viij. Conf. arom. q. s. ft. boli viij. Sumt. j. mane et h. s. u. a.

Pergat in usu misturæ ter ind.

April 8.—Being alarmed by the appearance of unusual symptoms he desired my immediate attendance. He complained of being extremely faint and low, with giddiness and imperfect vision since yesterday. These were evidently the effects of the digitalis, having taken the last bolus this morning. In other respects was sensibly amended.

Omitt. dig. sed,

℞. Decoct. cinch. ang. ℥vij. Myrrhæ ʒj. Tinct. gent. c. ʒiij.

c. ℥iij. Sp. æth. nitr. ʒij. Kali pp. ʒß. M. sumt. coch. tria ter ind.

April 22.—Called on me to say that he continued in every respect free from dropsical symptoms; the legs being restored to their former state; the urine in full quantity; appetite good; and strength much improved, though the weather has been extremely unfavourable for his riding on horseback, as particularly enjoined. Both the plasters were applied, and the mixture persevered in since last report.

Was caught in a hail storm four days since, got wet, and has had some cough, with dyspnœa. P. irregular.

℞. Calom. gr. vi. Scillæ gr. iv. Digit. gr. x. Myrrhæ ℈j. Simul tere et adde g. asæfœt. ʒß. Extr. gent. q. s. ft. pilulæ xviij. Sumt. duas sing. noct. h. s.

June 8.—Again came to me. Says, that till a few days back he continued tolerably free from complaint; that his urine has diminished in quantity, with the usual sediment; that he has a slight cough, some difficulty in breathing, and a pain of the right side and breast. Looks well in the countenance, has no thirst; nor do the legs swell. Appetite and strength, however, somewhat impaired.

℞. Scillæ pulv. gr. x. Dig. purp. ℈j. Myrrhæ ʒj. Simul tere et confect. aromat. q. s. ft. pil. xxiv. Sumt. duas meridie et hor. viij. P. m. cum mist. seq. coch. iij.

℞. Infus. gent. c. ℥vij. Kali pp. ʒj. Sp. æth. vitr. c. sp. æth. nitr. a ʒiij. m. ft. mist.

Si urgeat dyspnœa iterum appl. empl. e pice burg. sterno.

The above symptoms were quickly removed, and he enjoyed his usual state of health till the autumn of 1800, when he again consulted me.

CASE XCIII.

June 17.—Early this morning my immediate attendance was desired on the Rev. Mr. ———, of ———, near Harwich. His age 51, of tall stature, naturally robust and muscular, but of late years disposed to corpulency. His symptoms were, extreme difficulty in respiration, which has for some weeks prevented him from lying down in bed, or from walking but with great deliberation: when going up stairs, has been obliged to rest some minutes to take breath, before he reached his chamber; and although propped up by pillows, nearly in a sitting posture, in bed, he is suddenly roused from sleep by a sense of suffocation, and extreme anxiety about the præcordia, which obliges him

him to get up and walk about the room; of late this has happened three or four times every night, in so violent and alarming a degree, that his life has been despaired of; urine very scanty, of a dark red colour, but with very little sediment; pulse extremely irregular and intermitting; legs œdematous up to the knees, and readily pitting on pressure; tongue foul, with great thirst; no appetite; bodily strength much impaired; face and conjunctiva of a deep yellow tinge; and he brought up some yellow bile this morning. Bowels costive; memory much impaired, with giddiness, and confusion of ideas at times; constant drowsiness, amounting sometimes to stupor; hands and feet cold. Has not been addicted to intemperance in the use of intoxicating liquors, but in the habit of indulging very freely in large draughts of beer, both at meals, and at all times when heated by exercise. Has used much bodily exercise till of late years, when his habits have been sedentary and studious, frequently sitting up till a late hour.

For nine years has been subject to a peculiar uneasy sensation in the lower part of the abdomen, from the umbilicus to the pubis, for which he has been in the constant habit of using active purgatives three or four times a week, as the only means which, he fancied, relieved him.

About two years since, when stooping to measure timber, was suddenly seized with a giddiness of the head, and confusion of ideas, nearly amounting to a fit of apoplexy, for which he went to town, and put himself under the care of an eminent physician. It was treated as an attack of apoplexy, for which copious v. s. and cupping were frequently used. He returned to the country much reduced in flesh and strength.

The first symptom of his present complaint was perceived in February, 1806, when he was suddenly roused from sleep, and thought himself in the act of dying. He had another attack when doing duty, some months afterwards, and a third in December following: the pulse intermitted each time; recovered its former regularity after the first and second attacks, but has been more or less irregular since the third.

He has been attended by three physicians of the first eminence in town, and by one in the country. Their attention appears to have been principally directed to the affection of the head, and to the peculiar sensation of the abdomen, acknowledging they could do nothing for the disorder of the chest. The result of a consultation held by two

two of them in town, in April last, was the recommendation of a seton in the neck, and mild inert palliative medicines. On the suggestion of Mr. Nunn, of Manningtree, the digitalis was once prescribed by one of them, but soon abandoned.

On the presumption that his complaints originated from water in the chest, Mr. Nunn and Mr. Silke his partner, who constantly attended, prescribed the digitalis in January and March last, with sensible advantage, as the pulse recovered its natural regularity both times: and Mr. Nunn reminding me of a case, apparently as hopeless as the present, in which I recommended the foxglove, with him, with complete success, lamented that the prejudice against it here was so strong, as to preclude him from prescribing it again.

On assuring the patient and his family, that the medicines I should recommend would produce no violent or unpleasant effects, they left me to proceed as I should judge fit, unfettered by any restrictions. Had a blister applied to the chest, and a calomel and squill bolus last night, which were the means of procuring some disturbed sleep.

℞. Calom. gr. vj. Kali vitr. myrrhæ aloes a. gr. x. Tere simul. et conf. ar. q. s. ft. pil. viij. quamp. sumat ij. et repr. p. r. n.

℞. Calom. gr. jß. Scillæ p. gr. j. Crys. tart. p. ℈j. Conf. ar. q. s. ft. bolus sing. noct. s.

℞. Inf. dig. p. (ʒjß. ad ℥viij.) ℥j. Sp. æth. nitr. ʒß. T. cort. aur. ʒj. Kali pp. gr. x. Ol. m. pip. gt. j. M. ft. haust. mane, mer. et vesp. per dies tres, vel iv. s.

He was directed to refrain from beer, but to drink freely of negus or gin-punch, acidulated with crystals of tartar; to have a few glasses of Madeira daily; and when his appetite returned, to have solid nutritive food, instead of the slops to which he had been accustomed. Mr. Nunn was requested not to continue the digitalis beyond the third day, if it should occasion the slightest nausea or unpleasant effect; and to substitute the infus. gent. c. for it; at all events not to persevere in it after the fourth day, having appointed to see him on the fifth.

June 22.—From voiding only half a pint of urine daily, for some time prior to my first visit, he passed, by measure, five pints every day after the first 24 hours, with proportionable relief of every symptom. For two days had been able to lie down in bed, and enjoyed sound uninterrupted refreshing sleep: swellings of the legs gone; appetite and strength returning; was able to walk without assistance

sistance an hour and a half yesterday in his garden. Has had occasion to use the pills only once, the boluses having procured two motions daily without griping. No sickness or any unpleasant symptom from the foxglove. Took one draught to day with the infus. gent. c.

Pergat in usu haust. cum infus. gent. c. vice inf. fol. dig. repr. boli sing. noct. h. s.

June 29.—By previous appointment came twelve miles to meet me: has continued to mend; rides out every day in an open chaise, and drives himself; appetite craving, and he has indulged it too freely, especially at night, in consequence of which his stomach was disordered one night; and he has complained of giddiness and confusion of ideas at times.

Appl. empl. canth. nuchæ.

℞. Inf. gent. c. ℥jx. T. cort. aur. ℥i. Acidi nitr. gt. ix. ad. vj. m. ft. haust. cum pil. infra præs. No. ij. s.

℞. Myrrhæ, columb. p. a. ℈j. Zing. p. gr. x. Ol. m. pip. gt. jv. Syr. zing. q. s. ft. pil. xjv. Repr. boli ut ante.

July 8.—Came seventeen miles to meet me, as previously agreed upon, and drove himself; continues to improve progressively; appetite more natural; and digestion good; head much relieved by the blister; has transacted business, and written letters, which required mental exertion. Walked up a hill yesterday a mile from home, and back again without inconvenience. Has recovered his natural florid complexion. Medicines to be continued, the draughts twice a day only.

July 22. Came as before to meet me. The day being excessively sultry, and being exposed for near four hours to an intense sun, I was surprised to find him very little affected by the heat. On the 13th he complained of great pain in the lower part of the abdomen, and in the course of the evening had three motions, consisting chiefly of dark grumous blood and a gelatinous like substance; the last without any fæculent matter. He mentioned with much satisfaction, that he has been since free from this painful complaint, which had more or less constantly harrassed him for nine years; and that for three nights the bowels performed their functions regularly, without any assistance. The gums being slightly affected, directed the boluses to be taken only occasionally. Having been formerly recommended the shower-bath, I permitted him to try it (especially as the weather had been intensely hot) every other morning. Acknowledges himself very much improved in every respect; and talks of making an excursion

sion to Westmoreland in an open carriage. Was desired to go on as before.

It may be sufficient further to remark, that from this period Mr. H. either continued to meet me occasionally, or that I visited him at his own house, for some months. He became at length extremely impatient under the restraints imposed upon him; and notwithstanding every endeavour on the part of his amiable lady, the paroxysms of passion, when denied whatever he called for, were such as to render it impossible to keep him within bounds; yet all that was possible that the most tender and affectionate regard could dictate, was done by her. She persevered to the last, and to the last the remedies did not fail to evacuate the water, and afford relief. His head, however, became more and more affected, and the bilious attacks more frequent and violent. He died on the 16th of July, 1808; yet the water was completely evacuated not many days before.

CASE XCIV.

August 10, 1800.—Mr. Clover, a miller, æt. 53, of very short stature, thick make, and corpulent. Has worked hard, lived well, but not addicted to excesses in drinking. Has orthopnœa of the most distressing kind, even without any motion or exertion, being obliged frequently to raise his head suddenly, and to elevate his shoulders and arms at the same time, while he makes several laborious efforts to draw his breath; inability of lying down in bed for a fortnight, before which he could only lay on the right side. Is frequently roused from sleep suddenly, though he is supported by pillows in a sitting posture in bed. Urine high coloured, diminished in quantity, but without sediment; legs anasarcous to the knees, hard, resisting, and of a dark red colour; pulse full, and occasionally an intermission during the paroxysms of orthopnœa; face livid; no cough, pain of the chest, numbness of the shoulders, nor swelling of the abdomen; a peculiar oppression not only of the epigastrium but of the whole body; great debility and no appetite; much thirst. Disorder commenced abont December last, without any evident cause, and has been gradually increasing since. Has used various medicines without advantage, and was prescribed the following lately by a physician of extensive practice, who attended him.

℞. Fol. dig. p. ʒß. Aq. ferv. ℥x j. Infunde et ft. infus.

℞. Infus. colat. ℥j. Sp. æth. vitr. gt. xx. Tinct. opii c. ℈ij.

℈ij. Aq. ʒij. Olei m. pip. gt. ß. M. ft. haust. 5tis. vel 6tis. horis s.

No sensible effect or relief was produced. I prescribed as follows.

℞. Infus. dig. p. (ʒiß. ad ℥viij.) ℥j. Sp. æth. nitr. ʒj. Kali pp. ℈j. M. ft. haust. ter ind. s.

Appl. empl. canth. pectori.

℞. Calom. scillæ a. gr. j. Opii gr. ß. Crystall. tart. p. gr. vj. Muc. g. Arab. q. s. ft. bolus sing. noct. h. s. s.

I consider the case in every respect as very unpromising.

August 15. In thirty-six hours after beginning the medicines, was sensibly relieved, and has continued to mend ever since, the urine flowing in full quantity, and the breathing and every other symptom being proportionably relieved; though he has taken his medicines very irregularly. Pergat, U. A.

Aug. 23. Improving in every respect, gaining strength, and able to walk out daily; lies down in bed, and breathes in every posture with freedom; more so in bed than in any other. Was directed to persevere in the same plan.

The water was repeatedly evacuated, and the symptoms were relieved by these medicines, but he relapsed soon afterwards, and at length laying aside all medicine, the disorder increased, and proved fatal, not many months after my first visit.

Though this case was omitted in its proper place, yet it is thought worthy of insertion here, not only as being in itself interesting, but as shewing the inert practice too generally adopted in this disease.

The combinations and formulæ most approved of by Dr. M. in his work, are,

1. The standard infusion, viz. ℞. Dig. purp. fol. incis. ʒiss. Canellæ alb. contus. vel zingib incis ℈j. Aq. ferv. ℥viij. Infunde per horas iv. in vase operto; dein liquorem effunde.

If the leaves be used as they are suspended in paper bags in a room in which a fire is constantly kept in winter, without farther drying, which should always be done for infusion, the liquor will pour off perfectly clear, and save the trouble of straining. The stalks and large fibrous parts should be separated, and the leaves cut into small pieces.

2.—℞. Infus. dig. purp. ℥j. Aq. menth. pip. ʒiij. Kali pp. gr. x. ad ℈j. Sp. æth. nitrosi. vel sp. æth. vitr. c. ʒss. ad ʒj. M. ft. haustus bis terve de die sum.

3.—℞. Lin. camph. ℥ij. Sp. ammon. c. tinct. opii aa. ℥ß. M. ft. Lin. This

This liniment well rubbed upon the epigastrium or abdomen, I have repeatedly prescribed with immediate relief in violent sickness and vomiting, or acute pains of the bowels. The parts should be covered with hot flannel afterwards.

4.—℞. Dig. purp. fol. pulv. scillæ recent. exsicc. p. aa. gr. jx. Calom. gr. vj. Myrrhæ ℈ij. Crystal. tart. pulv. ℈j. Tere simul et extract. gent. q. s. ft. pil. xxiv. Sum. duas usque ad tres sing. noct. et mat. superbib. liquor. infra præs. cyathum vel libræ quadr.

5.—℞. Cryst. tart. pulv. ʒij. Solv. in aq. ferv. lib. j. add. rad. zing. incis. ʒß. Sacch. pur. q. s. Sp. juniper. ver. ℥iß. vel vini rhen. ℥iij. M. propinat æger quant hancce vel duplicem quotidie.

As soon as the patient begins medicine, the free use of this or some diluting drink, according to former habits, is directed as an absolutely necessary part of the plan.

6.—℞. Tinct. tolut. vel benz. c. ʒß. ad. ʒi. Muc. g. arab. vel ov. vit. q. s. ut miser. Infus. dig. purp. ℥i. Mell. scillæ ʒi. ad ʒij. Sp. æth. vitr. c. gtt. xxx ad ʒi. Kali pp. gr. x. ad ℈j. M. ft. haust. ter ind. s.

The author is not ignorant that here a kali acetat. may be formed, but the kali pp. will still predominate.

7.—℞. Fol. dig. purp. pulv. Scillæ pulv. aa. gr. i. Calomel. gr. ß. ad gr. j. Cryst. tart. ℈j. ad. ʒß. Syr. zingib. q. s. ft. bol. sing. noct. et mat. s. Besides this, No. 5 should be given freely.

8.—℞. Infus. gent. c. ʒix. Kali pp. gr. x. ad ℈j. Tinct. cort. aur. ʒiß. Sp. æth. nitr. gtt. 40 ad ʒi. M. ft. haust. ter ind. cum pil. infra præs. No. ij. s.

9.—℞. Ferr. vitr. kali pp. aa. ʒß. Myrrhæ ℈ij. Simul in pulv. subt. tere et extract. gent. q. s. ft. pil. xxiv.

10.—℞. Calomelan. gr. ij. ad. iv. Crystallor. tart. p. gr. x. Zing. pulv. gr. v. probe simul in pulv. subt. tere et syr. Zing. q. s. ft. bolus h. s. s. et seq. matutino degir. æger. haust. infra præs.

11.—℞. Infus. sennæ tart. vel inf. tamarind. cum senna (Ph. Ed.) ʒx. Mannæ ʒj. Tinct. sennæ vel jalap. ʒij. ad ℥ß. M. ft. haust mane sumendus.

12.—℞. Tinct. benz. c. gtt. 40 ad 60 vel tinct. tolut. ʒi. Cum muc. g. arab. q. s. redact. Myrrhæ gr. x. Aq. m. pip. ℥i. æth. nitr. vel vitr. c. ʒi. Kali pp. gr. x. M. ft. haust. ter ind. s.

13.—℞. Resin. jalap. calomelan. zingiber. pulv. aa. gr. ij. ad iv. crystall. tart. pulv. gr. v. ad x. simul tere et syr. zing. q. s. ft. bolus h. s. s.

To

To the Editors of the Medical and Physical Journal,

GENTLEMEN,

A Disease which, I apprehend, is not attributed peculiarly to the British climate is the Plica Polonica. Being a few days ago in the shop of Mr. Rogers, printer, of this town, he presented to me for inspection a plica 9 feet long, which is now in his possession. It instantly struck me, that a malady of this nature, not peculiar to our country, existing under the influence of British atmosphere, was a most singular instance; it attracted my attention, and induced me to investigate into the particulars of the case.

In the year 1796, Mrs. Clarke, who lived in the Rectory House, Great Saxham, Suffolk, said that her mother, who was the subject of this case, had an elf-lock.* After it grew to the above length, it was accidentally trod upon and detached from the head, without producing any constitutional affection.

It seems that the excellent observations on plica in your Journal for March, by M. de la Fontaine, are substantiated by experience; he says, that it is dangerous to cut a true plica in its first stage, and when adhering to the head; we must see new sound hairs springing up, which push it downwards, before we can execute this operation with any beneficial result.

I presume that the disease which existed upon the subject in question, must have gone thro' its various changes previous to this accident, or else it would have been productive of ill consequences, epilepsy, &c. as is stated in M. Theder's letter to the author on the above subject. It appears by the information I obtained, that this plica was perfectly distinct from the sound hairs, as is described by M. de la Fontaine, when in a fit state for extirpation; but what is singular, it re-appeared, and grew to the length of 3 feet, at which time she was affected with the variola, which terminated fatally. The plica did not seem sensible to the touch, as she was in the habit of running a comb thro' it to keep it together, and she used to consider it as a great ornament. Such is the fact, that this disease has existed in this neighbourhood; whether it originated from contagion or neglect of cleanliness, I was not able to learn.

Newmarket, April 10, 1810. I am, &c. E. L. KNOWLES.

P.S. Does a spurious plica ever grow to the above length?

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* I understand that the peasants call it by this name.

Observations on Convulsion, as a Consequence of Disease, illustrated by Cases. By Mr. JOHN HOWSHIP, Surgeon.

NO part of the animal economy has been so frequently the subject of fanciful speculation as the brain; an organ, the general purposes and offices of which may be deduced from the consideration of its situation and connections. Thus far we may have proceeded, but no further; for whenever we attempt to go beyond this line, and enter into the supposed manner in which the material and immaterial agencies operate reciprocally upon each other, in those various movements of the animal machine, in which volition is concerned, we soon find ourselves surrounded on every side by a maze of perplexity, where every fancied advance only proves how readily we deceive ourselves, and where even conjecture cannot find the least plausible foundation.

In considering the circumstances that indicate the due performance of the functions of the brain, in its healthy condition, and contrasting these with the numerous train of symptoms by which the presence of disease is pointed out, the most embarrassing conviction is, that we have repeatedly known that in cases where before death, every external sign of derangement in the structure of the brain has existed, examination afterward has decidedly proved the non-existence of any visible alteration, either in the structure, or even actions of the organ; and on the other hand, where no external mark or sign of particular disease has been observed to occur in the life-time of the patient, the most extensive state of disease in some part of the brain has been after death detected. It is our first duty to improve upon what we know, and the most important conclusion that can be drawn from such considerations as the above, certainly is this, that as the difficulties which here interrupt our progress are in their nature almost insurmountable, the ardour of our pursuit should be still further quickened; and that as the impediments to be removed are in themselves very considerable, so should our perseverance be taught to increase, until it shall rise even superior to every difficulty.

The treatment of convulsive disorders, supposed to depend on some derangement either in the structure or the functions of the sensorium, has at all times necessarily been governed according to the particular theory of the disease and its phenomena, that have been preferred by the

practitioner. Upon this he has reasoned, and upon this he has built his practice, and in many, or in few instances, it has still been attended with success. In many cases of such disease terminating fatally, it has been proved by dissection, that a general state of convulsion hás been produced and kept up in the habit, by the growth of some diseased substance within the cavity of the cranium. In other cases again, the same series of symptoms have arisen, and after continuing for a given length of time, they have disappeared, and from the good fortune of the patient in recovering, the true result of the disease has never been known. Here is a door opened to conjecture, and from the fallacy of reasoning in such obscure inquiries, it is necessary that every opinion should be formed cautiously.

We have known of instances where tumours have formed within the skull, and where, as the disease increased, the oppressed portion of the brain has been from time to time removed from the situation of the tumour, by the action of the absorbent vessels; this action being set up as a provision, in order that by the sacrifice of a small part to the good of the whole, the circulation and functions of the general mass of the brain should still be maintained in all that undiminished freedom essential to the health and activity of the body.

We have seen instances, where not one, but many tumours, some of very considerable size, and probably of scrofulous nature, have been produced upon every part of the dura matral covering of the brain, and even in such a case as this, from the persevering action of the absorbent vessels in and about the cortical substance of the brain, the removal of the one material has kept pace with the deposition of the other, so that the functions of the sensorium were to a certain degree still carrying on, and life was still prolonged, until, from the continuing increase of the disease, the condition of the brain became at length so feeble and imperfect, that it could no longer impart the energies essential to life, and the complaint then soon destroyed.

In the consideration of the most proper treatment in epilepsy, as being one species of convulsion, very great diversity of opinion has prevailed; one class in the profession maintaining that it is to be cured only by diminishing and lowering the actions and powers of the constitution, and by withholding all those medicines and applications that can in any way produce excitement, either in the vascular or nervous system; while another class, that depletion is bad, inasmuch as convulsion arises as the consequence of an irrita-

ble

ble state of fibre, and that whatever diminishes strength, increases mobility, and thereby confirms the very disorder which we intend to remove. Upon the same principle, that of allaying the increased irritability in the habit, a regular course of opiate medicines, under prudent conduct, is the most advantageous practice of any.

Upon both sides of this question, much has been said, and indeed the arguments brought forward in favour of each practice have been so ingeniously supported, and so powerfully contended for, that it becomes very difficult to say positively which, or if either of them, are altogether wrong; probably, with certain limitations, each may be right and proper in particular examples of these diseases. At all events, this conclusion must be just, and is at the same time very important, that while so much obscurity still dwells upon this branch of medical study, while our acquaintance is still so partial with most of the disordered actions to which the brain is subject, it is evident, that the most secure and firm foundation that can be laid for the advancement of our knowledge in these complaints, will be secured by our watching carefully, and setting down correctly, all the circumstantial histories that can be traced at the sick bed-side; if this task is performed with fidelity and truth, our stock of useful information must increase, in spite of every obstacle to its growth, and it will increase by the heaping up of a store of the most valuable of all materials.

A Case in which Convulsion, connected with great Constitutional Debility, was treated by the depleting System.

Mrs. Cowan, the wife of a soldier, in the 82d regiment of foot, a very small and delicate figure of a woman, 28 years of age; from a combination of the most distressing incidents was exposed with an infant at the breast, for several days journey, in the severe winter of 1808. She had to pass through Lincolnshire, at a time, when the inclemency of the season had left the roads covered several feet deep in snow. This poor woman was several times, while journeying, so deep in the snow, that she very much doubted if she could ever get through it. Just before this, she had suffered shipwreck, and at the time when the vessel struck upon the rocks, she received so severe a shock from the alarm, that it was with difficulty the humane exertions of those around prevented her from fainting. Since that time, she said she never had been exactly well in her head. While on the journey, her peril was so great, that

 she

she was sometimes obliged to lay down her little infant for a time upon the snow, in order that her exertions might be made with more freedom to extricate herself.

She reached however the town of Scarborough in Yorkshire, the place to which she was going, and being restored to her husband and family, she made no particular complaint for some time after. Her disorder then seemed to be deficient strength in the circulation and animal powers. The pulse was extremely small, low, and slow; the skin cold and very pale; the tongue clean and moist; the appetite very trifling. There was some head-ach, and she complained that she could not rest well at night, but was without refreshing sleep.

In order to restore, if possible, the proper balance of the circulation and assist in the re-establishment of the external heat, very minute proportions of the tartarized antimony were directed in solution, to be frequently taken; and the patient was requested to avoid those constant personal exertions upon which the neatness, and indeed the existence of her family depended. This request was urged from the necessity of her own situation, but it was a desire with which it was ill in her power to comply. Although exceedingly feeble, she still continued to scour, wash, and do all the work of her family.

On the morning of Saturday, January the 14th, 1809, after very great exhaustion from labour, she fell suddenly down while passing over the step of her own door; a person who was near her, heard the fall, ran to her assistance, and found that she was entirely insensible. She was, as soon as possible, carried back to her bed, upon which she lay the whole of the forenoon: she was apparently in a tranquil state, as if asleep; respiration was continued with great freedom and regularity. The face was pale, sunk, and cold; frequent slight convulsive tremors took place, and these occasionally returned, for the space of two hours, when they altogether disappeared.

In the evening the pulse was at 70, and the tremors had returned with occasionally rather violent contractions of the muscles of the limbs, at which periods, the pulse became perceptibly harder than before. In about half an hour, however, she came to herself, soon after the spasms had ceased; she opened her eyes, and complained of great and shocking pain in her head, attended with terrible shooting darts of pain passing through the eye-balls; she could not bear a candle to be brought near the bed, from its aggravating the painful state of her eyes. With the

above

above symptoms, she now mentioned her having a constant roaring noise in her ears as if it thundered; her countenance was still sunk, and her complection paleness itself. Yet from her symptoms, notwithstanding her excessive weakness, it was pointed out to her that she must lose blood; the proposal somewhat startled her, but she made no objection to what was advised. The arm was bound up for some minutes before, with some difficulty, a vein was perceived; it was sufficiently evident to the touch, but so small, and so far below the surface, that it was not discernable to the eye. This vein was opened, and about three ounces of blood were drawn; a vein in the other arm was next opened under the same circumstances, and with the same effect; so that by this operation, she lost about six ounces of blood, this to her was a considerable quantity, and she found herself materially relieved; she said she was much better, but that she was still "very bad."

An hour after she had been bled, while laying very comfortably warm in bed, she was suddenly seized with a rigor and shivering, exactly resembling the first stage of an ague fit. The pulse was at this time very small but hard; and the skin very pale; she was, soon after this, sensible; and said again, that she was "very bad." This state of tremor did not perfectly subside before half an hour had passed over, when it ceased. Her head was now directed to be shaved, and covered with a large blister; after this application had been made, she was ordered to take thirty drops of the tincture of opium in a draught, and this was repeated soon afterwards, which procured her some sleep.

Sunday morning, she was something better; the tartarised infusion of senna was directed, and repeated till it produced two motions; towards the evening of this day, she found herself much better, but on a sudden and very unexpectedly, her eyes were closed; her limbs became rigid; and she was shaken by a convulsion decidedly more violent than ever. Her body was at some moments raised up from the bed by the violence of the fit. At this time her pulse was seventy-two, and small. The convulsion subsiding, she soon came to herself, and upon being spoken to, said she had still the same loud voice in her ears, and the same extreme sensibility to light. In half an hour more, she was much better, and spoke quite distinctly and rationally, and explained that the pain in her head was very much relieved. Before the bleeding, this was of a dull, stupid, heavy, and oppressive kind, but it was now of ano-

character, being sharp, and frequently darting about the brain. The most important point of relief, however, as she herself expressed it, was, that now her mind and judgment was much relieved, and more clear than before. There was no heat about the skin, nor the least thirst; she this day took the saline mixture frequently, with ten drops of the tincture of opium in each dose.

On Monday morning, January the 16th, there was occasional light wandering and tendency to delirium; she said upon being examined, that she had now no noise in her ears, nor the least pain whatever in her head, but was in every respect quite easy. The pulse had risen to 84; the saline mixture as the day before, was continued.

In the afternoon she was perfectly sensible, without even the least disposition to delirium; but precisely at the same hour as the day before, she was seized with slight spasms, the eyes now open and fixed in their sockets; in this state she was perfectly insensible and very pale; she soon after recovered again.

In the evening she was quite sensible and clear; the pulse being soft and regular, at 75; the skin moist and perspirable. A swelling of the face has come on during the day, productive of much pain, and very tender. The light is no longer distressing to the eyes; the roaring sound, as of thunder, is no longer heard; the pain in the head nearly gone.

This morning she said that she felt "ill" all over her, but this evening she was much better, having neither heat nor thirst. She was directed through the day to go on as before with her saline medicines, and to have her feet immersed in warm water at bed-time.

Tuesday morning. She had passed a good night, and slept very well; and upon the whole was very much improved. At noon the light delirium returned for a time; her mind wandered, as it were, imperceptibly; without the least sympathetic change in any other respect. In about an hour this subsided, without having been attended with any degree of spasm, or the least general indisposition. During the course of the day she complained several times of the pain in her face.

Wednesday, January the 18th, she was very restless; got no sleep the night before; she described a sensation of pain very distressing about the heart, "as if something was gnawing it." The bowels were very regular; the saline mixtures as before were continued; and a blister directed to be laid upon the pit of the stomach.

From

From this time she continued to improve daily, her appetite returned in some measure; so that by taking nourishment in light forms she was hourly gaining ground.

This state of convalescence continued till the Wednesday following, January the 25th, when she suddenly fell off again. On the day before, she had felt some little pain in her head, but did not consider it worth mentioning; but on this day it was much worse, indeed, so severe, that she could scarcely sit up. In the evening she had the same pain in an aggravated degree, add to which she could not now bear the light to be brought near her eyes. Upon examining her wrist, it was found that the pulse had again sunk down as before her convalescence, from 80 in the minute to 70; the pulsation was rather hard than not; she complained of sickness, and several times urged without effect, to relieve her stomach by vomiting; she had no thirst; her skin was natural, and bowels regular. She was ordered the saline mixture every hour, and to have her feet immersed in hot water at bed-time.

On the next day, Thursday, she was again much better, and was nearly relieved from the pain in her head. She was reduced to a state of excessive lowness and debility, but it was necessary to be very cautious, in the adoption of any measures for the recovery of her strength; for it should have been before mentioned, that during the week of her improvement, and while she was perfectly free from her complaints, she had been allowed to take in very minute proportions, a light infusion of bark, and it was to this circumstance that her present relapse was attributed.

On Thursday evening she was ordered to take an ounce of the castor oil, to have her feet bathed, and to take her salines every hour during the night.

From this time she continued to mend uniformly, till on Sunday, February the 5th, she was seized while scouring out the room, with terrible shivering, so severe, as if cold water had been pouring in a stream down her back, and this was attended with very excruciating pain in her head, and in all her limbs pains also.

By confinement, and a return to her former treatment for a few days, she was again relieved, and advised to be more cautious for the future, in exposing herself to cold. For some time after this illness, so great was her general state of debility, that she complained of her legs swelling towards night.

For the improvement of her appetite, which was still very deficient, an infusion of the flowers of chamomile

was recommended, this not being so objectionable as the more powerful tonics. She for some time persevered in the use of this medicine, and gradually recovered her health altogether.

Mill Street, Hanover Square,
March 14, 1810.

(To be continued.)

A CASE of ABSCESS of the BRAIN.

ROBERT CLARKE, aged 50, a strong and powerful man, received an injury on the head by a fall, September the 12th; he applied immediately for surgical assistance, and was bled and purged, but the symptoms not being relieved, a blister was applied over his head, which did not afford the least relief. He was then sent to St. Thomas's Hospital, and was taken in, October 26th, 1809, six weeks after he had received the injury. At this time there was a complete paralysis on the left side of the face and of half the tongue, with a numbness in the cheek, and a faultering of articulation; he complained of great pain at the top of his head, on the side which was not paralytic.

Oct. 27, I ordered him a cathartic, and next morning Mr. Birch made an incision upon the part where he described the pain to be seated; after a few days, a considerable discharge took place, and he was much easier; he was kept upon the milk diet of the hospital, and occasionally took aperient medicines. When the wound was nearly healed, he again complained of the return of the pain in his head. Mr. Birch then ordered him pills with gamboge to be taken every night, and directed me to make a crucial incision through the scalp and pericranium. When these incisions suppurated, he again experienced great relief.

By the 3d of December the pain had left him, and the paralytic affection of the cheek and tongue entirely disappeared He seemed lively, and often wished to be discharged from the hospital. In this state he remained nearly two months, viz. till January the 28th. At this time the discharge from the wound was great, and when wiping off the pus I discovered a small hole, which appeared to penetrate both tables of the parietal bone, through which pus was thrown out by jerks; he did not complain of any symptoms which denoted matter upon the dura-mater; the caries extended, and exfoliation was the consequence;

he after

after this, about three days before his death he was seized with cold chills and violent pain in his head; the sight of the left eye became impaired, his pulse low, weak, and very frequent; and he expired Feb. 8, 1810.

Appearances upon Dissection.

Having laid bare the cranium, the parietal bone on the right side was found greatly diseased; ulcerations extended through both tables of the bone; this being removed, the dura-mater, corresponding to the diseased portion of bone was found ulcerated; the longitudinal sinus had been much inflamed and thickened, and its cavity was lessened; adhesions were found between the dura-mater covering the right hemisphere of the cerebrum and the falciform process. Upon dissecting off the dura-mater, an abscess was discovered in the posterior lobe of the right hemisphere of the cerebrum, containing about 2 oz. of brown coloured thick matter; this had extended into the right lateral ventricle to the infundibulum, and to the pituitary gland; the thalamus nervorum opticorum was of a dark colour, and likewise the corpus striatum. The brain, on the left side, was in a natural state, except that the plexus choroides was unusually distended with blood. Cerebellum natural.

That so much injury should have communicated within the cranium, and not produce more violent symptoms is worthy of remark.

Had the practice of making an incision through the pericranium, in order to remove the tension of that membrane been adopted directly after the accident, probably the extensive inflammation would have been arrested by the suppuration of the wound, and by the proper evacuations which should also have been directed.

The practice of a free incision on the injured scalp, which Mr. Birch insists upon as being necessary in almost every case, has been attended with such marked success in many violent injuries of the head, that I can venture to say, it should seldom or never be omitted. The hæmorrhage from the contused part is always beneficial; the suppuration of the wound is never followed by exfoliation; and it is only one line of incision, preparatory to what may be necessary, if the symptoms require a further examination of the injury.

I am, &c.

H. W. BAILEY.

St. Thomas's Hospital,
April 5, 1810.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

ALLOW me, through the medium of your Journal, to suggest two or three observations, in reply to a Correspondent of yours, who signs himself "A Lover of the Profession."

Surely, he does not merit that title if he is so decided an enemy to Medical Reform. It has long been a matter of surprise to me, that a subject so important, and intimately connected with the welfare and interests of society at large, should so long have lain dormant, and no exertions made to root out ignorance from the profession, and crush the deadly reign of empiricism. And shall we now, at this enlightened period, find men who are still willing to tolerate these abuses, and attempt to extinguish the kindling sparks of reformation?

But I sincerely hope that the feeble efforts of a few individuals opposing the proposed plan, will not in the least diminish that laudable spirit of exertion which has characterized certain members of the profession. My sincere wish is, that their endeavours may be crowned ultimately with success, and that the *abuses* at present existing in the profession, may be removed by the mild and judicious regulations of the *Senate*.

It is comparatively of little consequence to trace the origin of empiricism, or to ascertain whether, on the whole, the metropolis, or the country, suffers most by its pernicious consequences. It is sufficient to state, that evils do exist both in town and country of most alarming magnitude, and which call loudly for the interference of the Legislature. The influence of those *monsters*, water *Doctors*, is truly alarming; the most complicated legerdemain practised by Sorcerers, is comparatively trifling to the dark and mysterious mode of operation they have recourse to on the credulous minds of their *votaries*. Worse, and still worse, perhaps, are the cheats daily practised by the Quacks of this great and enlightened capital; but there are practitioners who, though they would openly disclaim the name of empirics, and disavow the practice, yet demand the attention of the reformers; they are men who never have been regularly educated to the profession, and whose knowledge is next to nothing; but by their assurance [illegible]mption, they impose on the minds of the credulous;

lous; they suit themselves to their passions and prejudices, and naturally gain an ascendancy over them; these men, destitute of science, practising only from a knowledge of facts, commit numerous mistakes, and too many fall victims to their misguided practice. Your Correspondent says, in one part of his paper, "that it is now impossible for the ignorant man to escape detection." But I would ask him, of what avail it is to detect the man after he has maltreated his patient, or perhaps reduced him to that state from which the regular practitioner is not able to relieve him? The deed is then done, and perhaps the consequence is inevitable. I think your Correspondent may abandon all his fears, respecting an aristocracy originating from the source whence he supposes; it is not compatable with common reason to imagine, that endeavours to remedy abuses relating to the practice of medicine, and restricting the exercise of the profession to those sanctioned by regular examinations before authorized persons, is ever likely to create disturbances in the state,* when the ultimate end of the reform in agitation is the preservation of the health of his Majesty's subjects. I shall not intrude any further on the limits of your work, but leave these observations for the perusal of your Readers.

Yours, &c.

AN ENEMY to EMPIRICISM in GENERAL.

Case of Strangulated Crural Hernia, operated on according to the Method of Don Antonio Gimbernat; with some Observations on the Treatment of Hernia; by JOHN C. WARREN, M. D.

(Read before the Massachusetts Medical Society.)

THE operation for the relief of Strangulated Crural Hernia has been formidable to good surgeons, because not well understood. Mr. Pott speaks of it with apprehension; and the method of performing it proposed by Mr. Benjamin

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* A lover of the Profession, appears to us only to have apprehended the establishment of an aristocracy *in the profession* which might be prejudicial to the public at large, as likely to be the consequence of the proposed re[...]lations; not that they were likely to effect any change in the esta[...] ranks of society, or could create any *disturbance in the state.*

Benjamin Bell seems so inadequate, that it must have been a difficult affair under his hands. An accurate investigation of the anatomy of the parts concerned in it has removed those difficulties, and dispelled those apprehensions. It may now be considered comparatively safe by the surgeon, who is acquainted with the works of Gimbernat and Hey, and the admirable production of Mr. Astley Cooper, and who is also practically versed in the anatomy of the parts. As this operation has not been practised here till lately, I have taken the liberty of laying a case of it before you, with the hope of its exciting attention to this subject.

Mrs. C. a lady residing fifty miles from Boston, had been affected with crural hernia sixteen years. On the 28th of January, 1807, from a slight cause, she was attacked with the symptoms of strangulation, which continued with increasing violence till the 4th of February, when I saw her. A small, quick, and weak pulse, tense abdomen, constant vomiting, and great tenderness of the diseased part, indicated that no time should be lost. Such efforts for the reduction by the taxis were made as the sensibility of the part allowed; and these proving ineffectual, the operation was decided on by us, and assented to by the patient.

The tumour was three inches long, and two wide; extending in the direction of the crural arch. Mrs. C. being placed on a table three feet and a half high, the legs hanging over the end of it, an incision, four inches long, was made across the hernia, at the termination of its inner third. This exposed the fascia, very thin, and requiring cautious dissection; after which the hernial sac appeared, and was opened at its lower part without appearance of water. When the sac was dilated, a dark coloured and apparently disorganized mass was seen; and it was not without frequent turning and examination, that it could be ascertained to be a ball of omentum enclosing a portion of intestine, which closely adhered together.—These were separated with some hazard; for the adhesion was so firm, the parts so absolutely of the same colour, and the intestine so closely invested on all sides by the omentum, that a momentary inadvertence might have allowed the intestine to be opened. Small portions of omentum were left on the intestine, rather than to incur an unnecessary risk in separating them. The intestine was then examined. though it was very livid, yet as it possessed sensibility sufficient to prove the existence of life, an attempt

was made to return it, but the stricture was much too narrow to suffer this to succeed. The obstruction, which first presented, was formed by the *falciform process* of Mr. BURNS. When this was cut, the finger passed higher up to a stricture, produced by the internal edge of the crural arch, and the third insertion of the external oblique muscle. The tip only of the finger could be pushed into this stricture, by using a force somewhat greater than one would employ without its being indispensible. Then, the intestine being retained on the back of the finger, the curved bistory was insinuated on the fore part; the insertion of the external oblique cut toward the pubis; and, the knife being withdrawn, the finger passed into the abdomen. The intestine was then returned; but the omentum being enlarged, hardened, and conglomerated, a portion eight inches long was cut off, and a small ligature passed through the remainder, to retain the bleeding vessels at the mouth of the sac. Three ligatures were made through the skin, the wound was dressed with adhesive plaster, firm compresses, and bandage, and the patient laid in a state of ease and tranquillity, compared to that before the operation.

In two or three days some increased tension of the abdomen succeeded, and was relieved by the applications of the attending physician, Dr. S——. No other accidents occurred, and Mrs. C. recovered a state of more perfect health than before; which she has since continued to enjoy.

OBSERVATIONS ON THE TREATMENT OF HERNIA.

As the improved modes of practice, founded on the valuable observations of the celebrated Mr. CLINE, and on those of Mr. COOPER and Mr. HEY, are not yet generally diffused, I beg the favour of being allowed to add to the above detail some remarks on the treatment of hernia.

The Spanish surgeon, GIMBERNAT, tells us, it has been computed, that an eighth part of the human species is affected with hernia. So little attention has been paid to this disorder, that it is difficult to form an opinion of the proportion in this country. It probably does not exceed one in fifty. Many suffer without suspecting it, especially females; numbers of whom, affected with a small, almost imperceptible tumour in the groin, are little aware that it constitutes a derangement, which if neglected, may produce a painful disease and death. It is here well known, that females, supposed to be affected with *bilious colic*,

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have often concealed the existence of an abdominal tumour till too late, and perished miserably from a *strangulated hernia.*

The hernia, to which our attention is most commonly solicited, is the *inguinal hernia of males* in a state of strangulation. The treatment of it differs from that formerly employed. The old practice of raising the patient and shaking him by the heels, of using violent pressure to reduce the tumour, and of administering powerful cathartics, are now known to be unavailing, dangerous, and fatal. Correct anatomical and pathological views have given rise to the following methods.

1st. Let the patient affected with strangulated hernia be laid upon a bed, his head and pelvis a little raised. Let the feet be drawn toward the trunk, so as to elevate the knees, which should be in contact. The surgeon, standing on the side where the hernia lies, grasps it with one hand, makes a pressure toward the stricture, and with the thumb and a finger of the other hand moves from side to side the portion nearest to the abdominal ring. This process may be gently continued for half an hour.

2d. Should the TAXIS fail, it is advisable to take away blood in sufficient quant ty to cause a general relaxation of muscular action, and, at the moment this happens, to renew the taxis. Blood letting may be repeated in co-operation with the other remedies.

3d. Before the muscles recover their action, apply to the hernia ICE, or if that be not procurable, ETHER, or COLD WATER.

4th. The INJECTION *of* TOBACCO is a powerful application. This should be used with some caution. Mr. COOPER relates a fatal case produced by the use of one drachm of tobacco. An empiric in this place, employing it more freely, destroyed his patient in fifteen minutes. The injection should be prepared by infusing a drachm of tobacco in a pound of boiling water for ten minutes. If the subject be of an irritable habit, half of this should be injected at first; but if the whole quantity do not produce symptoms of relaxation, another dose should be administered. This remedy produces distress, and appears to have the inconvenience of being often expelled, before it can act upon the system. When this has happened, the addition of eighty or one hundred drops of tincture of opium has been serviceable in effecting the retention.

5th. The WARM BATH has not perhaps been often successful after the injection of tobacco had entirely failed;

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but it merits a trial. The temperature of the bath should be somewhat higher than that of the human body; and the space of time for bathing half an hour, which is long enough to afford all the good effects peculiar to the warm bath. The local application of cold may be conjoined.

6th. Opium is frequently a valuable remedy. It may be employed either merely to alleviate pain, or to effect a reduction. For the latter intention it is conveniently given, during the night, in repeated doses, while the other remedies are intermitted. In one case twenty grains taken in the course of a night produced a return of the hernia.

When these prove ineffectual, it does not seem advisable to exhaust the strength of the patient by other applications. The operation is now the only remaining resource, and to this recourse should be had, perhaps as soon as the others have been fairly tried; for although it may succeed at the end of a week, as in the case above related, yet I have seen it prove ineffectual at the end of forty-eight hours; and the disease has been known to be fatal in twenty-four hours.

After the reduction, the patient should be advised to put on a truss, and not to hazard the return of his complaint by relinquishing it within a short period. It has been usual to apply the truss upon the abdominal ring only; a practice founded on an erroneous idea of the egress of this hernia; for it does not issue from the abdomen opposite to that ring, but comes out through a fascia two inches above the ring, descends and piercing the tendon of the external oblique, appears at the external, or abdominal ring. The place therefore, where a truss should press in common cases, is at two inches, or an inch and a half, above the abdominal ring, toward the anterior superior spinous process of the ilium, or about midway between the os pubis and that process. Mr. Cline first suspected the existence of hernia above the abdominal ring, as I think, from seeing a man perish with the symptoms of strangulated hernia without an external tumour. Mr. Cooper has dissected these parts, discovered the internal ring, and perfectly demonstrated this interesting part of anatomy.

To the Editors of the Medical and Phyfical Journal.

GENTLEMEN,

ANN WHITE, a stout young woman, walked with her companions, on Wednesday October the 17th, 1809, from Selby fair to Barmly, a distance of seven miles, where she resided, apparently in good health and spirits. She arrived at home about two o'clock in the afternoon, and was observed to be unwell about four, complaining of a violent pain at her stomach, and vomiting frequently; she was afterwards much purged, and all the time desired to have repeated draughts of water, which I believe was warm when taken; she had no medical attendance, and died about two o'clock in the morning. It being afterwards suspected that she had taken, or some person given her, poison, an inquest was held on Saturday the 21st, about noon, when my partner Mr. Wikeley, and myself, were suddenly summoned to open the body. We found it free from putrefaction, not exhibiting any external marks of disease; neither did any material morbid appearances present immediately on opening the chest and abdomen. There were a few red patches upon the peritonæal coat of the stomach; the intestines externally shewed inflammation, though not to a high degree.

The stomach, previously tied at both ends, was taken out of the body; it contained about half a pint of fluid, of a reddish brown colour; the interior of the stomach, and also of the œsophagus, shewed high inflammation; the villous coat of the stomach was destroyed, and numerous portions of it, which had separated, were found in the fluid; other portions of different sizes, some about the size of a shilling, and isolated; others larger, still adhered. The parts attached were of an ash colour; felt hardish, as if corroded by a strong caustic. Upon *all* these portions of membrane, a white powder was both visible to the eye, and palpable to the touch.

The contents of the stomach were preserved, and submitted to chemical analysis.

The liver, the lungs, and the heart, appeared sound and free from inflammation; a few ounces of water were found in the pericardium. The internal surface of the intestiues, so far as they were examined, was highly inflamed; the intestinal canal was not, however, examined through whole course; many circumstances, unnecessary to mention,

mention, concurring to prevent the dissection from being carried so far as could be wished.

The history of the case, the state of the œsophagus, stomach and bowels, and the appearance of the white powders, justified the opinion delivered before the coroner, that the deceased had died by poison, part of which was found in the stomach, and was most probably arsenic. Having a wish to know what the white powder actually was, I obtained, by agitating the portions of membrane in water, by washing and filtration, a portion of it in a dry state.

Three grains of this powder were boiled in six drachms of water, but did not dissolve; to this fluid was added a solution of fifteen grains of the sulphate of copper, in an equal quantity of water; the union produced a mixture of a sky blue colour. A similar compound made with arsenic in the shop, was of a fine green.

Three grains of the powder, with two of charcoal and two drops of oil were mixed together, and after being secured betwixt two plates of brightened copper, were submitted to a red heat five minutes, but no white stain was perceivable. The fluid found in the stomach (with the washings, &c.) was boiled in a Florence flask, filtered, and suffered to cool. To a portion of this fluid a little lime water was added, and a slight white cloud only was perceived. A similar result took place on the addition to other portions of solutions of kali and sulphate of copper. The powder effervesced with sulphuric acid, and appeared to me to be white sand, with which, I have since been informed, it is common to adulterate arsenic sold in this country for farming purposes. To prove this, I made an experiment with two scruples, obtained from a druggist, and found it contained 20 grains of sand and chalky matter. The arsenic in this case was obtained by the young woman at a shop in Selby.

The preceding statement appears to me to be worthy of record in your useful publication, as a strong confirmation of the opinion delivered by Dr Bostock, on the memorable trial at Lancaster, viz. that a person may be destroyed by taking poison; and yet, in consequence of vomiting, purging, and taking diluents, none can be detected after death. The unexpected result of this investigation, may also prevent others from forming a decisive opinion from appearances only, particularly upon occasions where the life of a fellow creature will principally depend upon medical evidence. In the case published by Dr. Y

in the 20th Number of the Edinburgh Medical Journal, the patient having taken arsenic, was attacked with vomiting, purging, &c. and drank a large quantity of warm water; after death, some white powder was found in the stomach, which was supposed to be arsenic. It was not however chemically examined. In the above related case, the quantity of sand found, could not have been less than two scruples, and the quantity of arsenic consequently considerable; yet, though she died in a few hours, none could be detected in the stomach. So far as an inference can be drawn from a solitary case, it appears from the above, that the common practice of giving diluents, if continued a long time, upon the supposition of the poison remaining in the stomach, must frequently do harm, (particularly in cases where a soluble substance, as blue and white vitriol, has been taken) by irritating the already too much irritated stomach unnecessarily; and that it would be more rational and consonant to the improved state of medical knowledge, after the stomach has been well emptied by an emetic, and a moderate use of diluents, to adopt such means as are likely to subdue the inflammation produced, and to administer such remedies as will produce quiescence in the stomach and bowels. It is much to be regretted, that there are so few histories of cases of death by, or recovery from, the effects of poison, in your valuable publication. On looking over it from its commencement, I cannot find more than two or three at most, where mineral poison had been taken. It appears to me, that details of such cases would be useful to many of your readers, who from locality of situation, cannot always confer with their medical brethren in cases of emergency, and who, from the high price of books, cannot always obtain what information is already published. Your widely circulated Journal furnishes the proper medium for the communication of any new facts in the posession of, or observations made by any of your numerous Correspondents, who, I hope, as it is a subject not yet sufficiently investigated, will favour your Readers with the results of their experience.

I am, &c.

THOMAS JONES,
Member of the Royal College of Surgeons, London.

Howden,
April 2, 1810.

On

On Spontaneous Phosphorescence, by M. J. P. Dessaignes,

(From the Journal de Physique.)

I Have distinguished two sorts of spontaneous phosphorescence, the one transitory and fugitive, such as takes place in the union of a small quantity of water with quicklime, the other durable and permanent, as in luminous wood. I have spoken of the first kind formerly, and shall therefore confine myself in this place to an inquiry into the second species.

I ought in truth to acknowledge, that I have been anticipated in this part by N. Hulme, who in 1800, presented to the Royal Society of London, a very curious Memoir upon spontaneously luminous substances, but he directed his attention chiefly to fishes, and besides, notwithstanding all the interesting facts he has given us, he still left the question undecided. We shall see by what follows, that I have gone much further than he has done upon this subject, and that I have founded the explanation of this phenomenon upon the experimentum crucis of Bacon.

All wood, of whatever nature, is capable of becoming luminous, whether the trees are cut down alive, or whether they are suffered to rot upon the stumps, provided water penetrates into them, at a temperature from 8 to 12 degrees,* and they are in contact with atmospheric air. The wood of the oak turns brown, and changes its colour before it becomes phosphorescent. When the wood is compact, it is only the surface which is luminous; the inside of it is dark. Sound and dry wood is of the specific gravity 0,737; phosphorescent wood that is compact, and has not lost all its moisture 0,655; wood that has ceased to shine, and is dried by the air 0.349; it loses therefore in the act of phosphorescence more than half its original weight. The air pump has shewn me, that wood in full phosphorescence contains in its texture, more than one fourth its volume of atmospheric air.

The flesh of beef, of veal, and of fresh water fish, does not become phosphorescent so readily as sea fish. All these substances require a moderate temperature, as from 8 to 12 degrees, a constant moisture, and the contact of atmospheric air. Sea water, or a solution of salt, of equal strength, favours the developement of phosphorescence. The light with which fishes shine proceeds only from the surfaces, and

* Thermometre centigrade.

deed, the internal surfaces do not give out any light until they have been exposed to the air. The mucous parts, as the aponeuroses, the ligaments, the capsules, and the roes, are the most luminous.

I have examined by the eudiometer, the air contained in luminous wood: one measure of this, mixed with one of nitrous gas, produced an absorption of 0,53. A like experiment with atmospheric air, gave me 0,57. The atmospheric air therefore, which composes part of the substance of wood, is a vitiated air. I placed in an air-pump, a mass of luminous wood contained in a vessel of mercury inverted over a reservoir of the same fluid, and through the air extracted from the wood I passed lime-water, which instantly became turbid: it gives out therefore carbonic acid. Two pieces of wood taken from the same stump, the one not yet luminous, and the other in full phosphorescence, were plunged separately into two vessels filled with water; the first, after twenty days maceration, afforded only some colouring particles and extractive matter; the water of the second, nearly colourless, was a little turbid, and we could see about the wood a greyish flocculent matter, which fell to the bottom of the vessel, under the form of jelly, to give place to a further similar formation; this matter exhaled a fœtid animal odour; it appeared to me to discover the properties of vegetable albumen. I macerated in distilled water, equal quantities of the saw-dust of sound oak wood, and of wooc which had ceased to shine; the water of the first was very high coloured, and gave a precipitate with glue, with sulphate of iron, and with potash; the other was insensible to these reagents, it only became a little turbid with the potash. The water in which luminous wood was macerated, was easily rendered turbid on the third day; the colourless extract which it holds in solution, is more abundant than in sound wood, and appears to be much more concrescible. This same wood decomposed by sulphuric acid, gave as its residue, a coal of a bright and velvet black, like that from burnt gum: the same wood, when in a sound state, treated in the same manner, afforded a coal of a much coarser grain, and less black. The phosphorescence ceased to show itself long before the destruction of the wood; when it had no longe the property of shining, it appeared to have lost all its physical qualities, its flexibility, its strength of texture, and a great part of its weight; but the woody structure in the parenchyma was [illegible]erved, though it was deprived of its force of cohesion, [illegible] likewise retained all its chemical properties, for it is [illegible] in water and in alcohol, and is attackable as be-

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fore by the acids. It burns without flame, diffusing a very acrid smoke, and consumes away like tinder. It is well ascertained as to fishes, that during the whole time of their phosphorescence, they manifest no approach to putrefaction, nor is any change produced in the muscular fibre. But I have observed that the mucous juices which ooze out of the newly cut surfaces, are at first transparent and fluid; but when they become phosphorescent, they are sensibly viscid and clammy, and at last grow turbid, and there is separated from their substance a greyish powder, which gives them a sanious appearance: nevertheless, even this change is prior to their spontaneous decomposition. The muscular fibre, therefore, is not the real subject of phosphorescence, and this phenomenon has nothing in common with putrefaction.

Wood shines an equal length of time in distilled water and in river water, in each it does not give over shining till the end of six hours. Fish do not continue luminous in either of them longer than two hours. It is not true then, as Hulme affirms, that pure water extinguishes their phosphorescence immediately. Shining wood put into distilled water, and submitted to a pressure equal to 23 inches of mercury, becomes sensibly brighter under that pressure, but this luminous emanation does not continue longer than an hour.

Luminous wood and fishes continue to give out light for some time in azotic, hydrogen, and carbonic acid gases; but at length it grows weaker, and is entirely extinguished. We cannot but notice, when we are witnessing these experiments, that the phosphorescent matter, while it is shining, is already saturated with oxygen, which may serve for its combustion. Thus when we plunge them into water, and when we submit them to the air-pump, we can see a great quantity of air disengaged from both these substances. Two pieces of wood put into two vessels, one filled with oxygen gas, and the other with atmospheric air, shone an equal length of time and in a nearly similar manner. This same substance enclosed in atmospheric air, compressed by a column of mercury of 48 inches, shone in it with a much more brilliant light, and was sooner extinguished than in ordinary air. I left some luminous wood for three successive days in atmospheric air over distilled water; at the end of 12 hours there was an evident absorption equ[al] to ¼ of a line, which went on increasing. When [we] enclose the air in a vessel over mercury, and le[t the] wood remain in it, the level descends below the m[...]

lime, indicating a disengagement rather than an absorption, but when lime water is passed through it, it becomes turbid, and the volume of the water is diminished. We may observe the same phenomenon with luminous fishes, and we obtain the same results, but the absorption is more considerable.

It cannot be doubted, I think, after all the facts I have related, but that spontaneous phosphorescence is a species of combustion, in which there are formed water and carbonic acid. The substance then which affords it in wood and in fishes, must undergo a sensible change, because it loses some of its principles, and because, according to appearances, it is itself attaining a great degree of oxydation. But the ligneous principle in the wood, and the muscular fibre in the fish remain unaltered in the act of phosphorescence. In truth, the wood after this phenomenon, is clearly perceived to be altered in texture, and to have lost its most inflammable principle; but the ligneous particles still exist in the parenchyma, and appear to have retained all their physical and chemical properties. Their want of cohesion only announces the absence of a glutinous principle, which served to bind them together. This principle is to wood, what the gelatine is to the phosphate of lime in bones. Phosphorescence then, in this respect, is a phenomenon analogous to the steeping of hemp (*rouissage de chanvre*), and to the preparation which rags undergo in the fermenting trough of the paper mill. The limits which I have prescribed myself, will not permit me to give more than the results of my observations. I shall content myself with saying, that phosphorescence in wood is produced by a glutinous extractive juice, which serves as the connecting medium of all the molecules. This juice, by reason of its union with the ligneous fecula, prevents its being attacked by water, although this may have had ready access to it; but as soon as the oxygen of the atmosphere is combined with it, some of its combustible principles being set at liberty, its attractive force for the fecula is at an end, and it becomes soluble in water. This is the reason why rotten wood affords a great deal more colourless extractive than the same wood when sound, and that this extractive is so much more concrescible, and more disposed to form pellicles or gelatinous floccules. The matter which capable of becoming luminous in wood, absorbs oxy, and is acted upon by all the reagents, even the weak and extractive is the only vegetable substance which es these properties in any very great degree. Phosphorescence

phorescence of wood is not then the first step of spontaneous decomposition, as has been thought, but is clearly the result of a transformation in the mixt body, and of its progress towards oxydation; for I have satisfied myself that the glutino-extractive, when oxygenated and dissolved in water, passes successively through the vinous, acetous, and putrid fermentations.

The muscular fibre in animals ought not any longer to be considered as the subject of phosphorescence, for it undergoes no alteration during that phenomenon, and it is ascertained that this species of combustion is anterior to putrefaction. Besides, all the colourless parts, and those which abound in mucous juices, as the skin, the ligaments, and the roes, are precisely those which are the most luminous. The matter which in animal organs has the property of shining, is the albumino-mucous juice, for that alone has the power of spontaneously absorbing oxygen from the atmosphere; and we may observe, that it is only this which discovers some change in the act of phosphorescence, for it evidently becomes more viscid and plastic, and at length becomes turbid. In a temperature below 0, the mixt body remains undisturbed, and goes on at last to putrefaction without being luminous. At a very high degree of heat the constituent principles, freed all at once from the attraction of cohesion, which was an obstacle to any new arrangement of them, become tumultuously intermingled, and endeavour to form binary compounds, according to the order of their elective attractions, and these are such as do not produce any luminous emanation. Under a moderate temperature, the primary elements being but little affected by the heat, preserve their union, the equilibrium of their affinities, although disturbed, is not entirely destroyed. In this state of effort and resistance, the absorbed oxygen detaches from the substance a portion of its hydrogen and carbon, to unite itself singly with these, and it is to this partial elimination that the phenomenon of phosphorescence is to be attributed.

Thus, instead of regarding heat as a favourable circumstance for the developement of this property, it would be more just to say that it owes its origin to a moderate degree of cold, which by virtue of its antiseptic power, retards the approach of putrefaction. Saturated saline solution produce similar effects to cold upon the albumino-mucou juice; fresh water may in this respect be compared to h and very weak saline solutions to a moderate cold.

This juice, after having afforded water and c

acid, and being itself furnished with a larger quantity of oxygen, (for it must be observed, that before phosphorescence, the absorbed oxygen is only solidified in the substance, and not yet combined with it) becomes insoluble and concrete. Phophorescence, therefore, is a phenomenon analagous to that operation which takes place in respiration, and in all the vascular system, by which the lymph in undergoing various changes, and in receiving new proportions of oxygen, passes successively to the states of concrescible albumen, gelatine, and fibrine. This is the grand work of living nature, to which is owing the emanations of heat, which maintain our bodies in an equal temperature, and we can but believe, that this general transformation is accompanied by a disengagement of light, that would be sensible to our sight, if the opacity of the sides of the vessels did not prevent it. The act of phosphorescence is not then the commencement of putrefaction, but is evidently a continued progress of a substance imperfectly combined to a more intimate state of combination; a state, nevertheless, in which it does not long remain in substances deprived of life, because the action of water, of air, and of temperature, soon destroys this equilibrium, which can only subsist under the influence of the vital powers.

Substance of a Letter to the Commissioners for (Transports, and) Sick and Wounded Seamen, upon the Utility of Stimulants, and the Impropri ty of warm Cataplasms as general Applications in the Treatment of Ulcers. By D. I. H. Dickson, M. D. Physician, and Inspector of his Majesty's Fleet, at the Leeward Islands.

THE consideration of Ulcers, which in my letter to you of the 1st of August, I expressed my intention of resuming, is of much greater importance than probably may be supposed by those who have not had extensive opportuni-ies of witnessing opposite modes of treatment, and there-y of judging of the accumulated sufferings of the loss of nbs, and even of lives, that may accrue from improper atment. A diffuse view of a subject upon which so much been written, would be altogether superfluous; and ut meaning to discuss the nature and varieties of ul-they have occurred in different climates, in unhealthy

healthy situations, from unwholesome diet, or as connected with constitutional disease; my object is merely to recommend, generally, the use of stimulants for their cure, and to point out the pernicious effects of warm cataplasms and emollient greasy applications. Besides many others who have noticed the bad effects of such remedies, Dr. Trotter, in treating of the malignant Channel ulcer, remarks, that cold applications in the inflammatory stage, seemed to answer better than fomentations. These ulcers, he observes, extended rapidly over the limb, with a profuse fœtid discharge, and left the bone almost bare its whole length. From whatever causes this might arise in the Channel, effects very similar are apt to be produced by warm poultices in the West Indies. Their application is succeeded (in proportion to the tendency of the ulcer to malignancy) by a profuse, vitiated discharge, with a loss of substance so rapid, that one might almost imagine the fleshy parts are seen melting away, or disappearing before the eyes; and thus a small sore, in a few days, becomes a painful, extensive, foul, sloughing ulcer. That this has lately been strikingly illustrated, will appear by the following extract of a report made to me by Mr. Moore, late surgeon of the Marine garrison at Mariegalante, dated July 3, 1808. After stating that there were sixty-five cases of ulcer then in the sick report, he observes:

"Prior to my illness we had scarcely a case shewing a tendency to sloughing; but during the nine days that Mr. —— had charge of my sick, spirits and other stimulants (precisely after the manner you recommended to Mr. Nesbitt, and in which practice I had with success treated my ulcers) were thrown aside, and poultices substituted in their place, not only in the hospitals, but in the trifling sores of such as were not in the sick list, (always numerous). The consequence was, as you cautioned Mr. Nesbitt; sores, before inconsiderable, became sloughing ulcers. These cases crowded in day after day, and from not having an hospital sufficiently airy, and large, &c. it is no wonder that they soon became the completely contagious, sloughing ulcer. Lately, better accommodations have been procured as to air, &c. and with evident good effects. Of the cases now reported, twenty are in a sloughing state, forty-five granulating, and some nearly healed."

Previously to the receipt of this Report, I had learnt the great increase of ulcers in that garrison; and suspecting some impropriety of treatment, I had written to Mr. Nesbitt, the successor of Mr. Moore, recommending stimular

the total omission of cataplasms, attention in dressing, and the separation of the bad cases from the benign. On my arrival soon after at Mariegalante, at the end of July, tho' I found the general sickness much increased, and 75 ulcers on the list, yet many of them had much improved by the means above recommended. "Some were still extremely malignant; but the greater part were well conditioned and healing." Mr. Nesbitt was taken ill, and the ulcers were degenerating into highly malignant sphacelating stages, when he was relieved for a while by Mr. Mortimer, surgeon of the flag ship, by whose attention and assiduity they were brought into a state of immediate and rapidly progressive improvement. He informed me, the only means he employed were great attention in cleaning the sores, the application of rum, and compression. Mr. Mortimer was also taken ill, and the ulcers, under a French practice of unguents, &c. were again getting rapidly worse, when he was relieved by Mr. Waller, under whose treatment, consisting entirely of stimulants, they were again improving by the last accounts which I have received. Under all these disadvantages, and amidst great sickness and mortality, only two deaths can be traced to this source, and there are two or three cases of caries which may require amputation; but if warm poultices, and emollient ointments had been persisted in throughout, what would have been the scene of misery; what would have been the loss of limbs and of lives from this cause alone, it is painful to conjecture.

The Board will recollect that a similar instance occurred on board of his Majesty's ship the Northumberland, off Ferrol, in 1804. That ship had been almost over-run with ulcers, when the late Dr Stephen joined. He "found forty-three ulcers on the medical list, most of which appeared to be either in a state of high irritation and inflammation, or inactive, and torpid; with marks of gangrene and sphacelus." By the entire prohibition of cataplasms, and by the use of stimulants, they were reduced to six in a short time, and these were in a fair way of recovery, as stated by him to the Board, in a letter dated December 10, 1804. These evidences bear so decisively on the point in question, that I believe it unnecessary to bring forward any of the reports that have been made to me on ulcers on this station, or to detail the success of the stimulating plan in the hospitals here, with which you must be well acquainted. But exceptions must ever qualify general approbation;

probation; it is not pretended that spirit or other stimulants will arrest the progress of sphacelus in ulcers, but they will assist the extrusion, and greatly lessen the fœtor of the diseased parts; while in the simple ulcer, they will hasten cicatrization; and in the vitiated, they will tend to alter or destroy the morbid action going on.

Referring to my own experience, I have not found much difficulty in curing the general run of ulcers, or, at least in preventing their gaining any ascendancy; when I have failed in these objects, they have been of long standing, and had not been properly attended to in their early stages. I have, indeed, seen shocking cases of ulcers, but I am convinced that these had either been greatly neglected at first, or had been improperly poulticed, or had been plastered with ointments, or pasted up with various powders, until the confined and vitiated discharge became more and more morbid, and specifically malignant. This must be more especially the case in warm climates: hence the importance of dressing sores at least twice a day in such situations, of cleaning them well, and of changing the action of the vessels that secrete the morbid matter by stimulants. The remedies of this description, from which I have seen the most benefit, are diluted alcohol, or common proof spirit, as rum, brandy, &c. Solutions of the nitrate of silver (of various degrees of strength, but on an average, 10 grains to an ounce of water), of the sulphate of copper, red oxide of mercury, lime or lemon juice, &c. The latter, which has been strongly recommended by Drs. Blane and Gillespie, is very generally used, and with excellent corrective effects in foul, dark coloured, fœtid, or scorbutic ulcers. But as applications of general utility and efficacy, I prefer lint dipped in proof spirit, or the solution of the nitrate of silver, to the others. This is, however, of little consequence: as the certainty and quickness with which the ulcer may be cured, depend much upon changing the stimulus. When one remedy of this class has been long persisted in, it loses its effect, and the ulcer ceases to improve; in this case it should be immediately superseded by another, and that again by a third, and so on, recurring afterwards to the first, when it will be found to have regained its original influence. The benefit of this plan has been so generally noticed of late, that I trust it is superfluous to insist upon it farther.

A tight, well applied bandage of calico, will also ge nerally much contribute to the cure; and where there surrounding, slow, deep-coloured inflammation, it sh

be frequently wetted with spirit, lemon juice, saturnine solution, or water. It is often remarkable, how speedily the redness, tumour, and pain are reduced by these remedies, which act by increasing and supporting the energy and contractile power of the vessels, and thus assisting them to transmit the accumulated blood, by which, in this inactive kind of inflammation, they were distended and oppressed; while, on the other hand, warm applications will farther solicit determination, and increase the atony and relaxation of the diseased parts. Finally, then, my opinion of warm poultices is explicitly this: there are, occasionally, states of ulcer where gentle warmth and moisture, through the medium of a few cataplasms, will produce a soothing and cleansing effect; and there are others, where the healthy progress is so strong as not to be easily perverted by any application, however untoward; but with these exceptions, I infer that their temporary use is generally inexpedient, in warm climates at least; and that their continuance is always highly hurtful. When an ulcer has required a change of appearance, they have been too often resorted to without sufficient attention or discrimination. Every practitioner has recurred to them, and has been obliged to leave them off repeatedly; while many, if they have employed stimulants at all, and the ulcer did not instantly improve, or particularly, if it seemed to degenerate, have thrown them aside, condemned after a few inadequate trials. Should the employment of stimulants so very generally, if not exclusively, appear too indiscriminate, I have only to remark, that I have not found this to be the case, while I have seen much of the bad effects of the practice, which I here conceive it my duty to reprobate.

Of the difficulty of curing ulcers, in all ages, in certain situations and habits, or particularly on the lower extremities, I am perfectly aware; without going farther back, Baglivi states that ulcers on the legs were almost incurable at Rome, and wounds difficult to heal; while the like on the head were easily cured. Drs. Cleghorn and Hunter observed the same thing at Minorca and Jamaica; and very many authorities testify the great obstinacy of ulcerated legs, particularly in warm climates, and often the impossibility of curing them at all; yet, that they would frequently heal on the passage homeward. But as this difficulty, as well as the tendency to recur, will greatly de-[illegible]d on the length of standing of ulcers, which will again depend

depend on the manner they are treated at first, I must still express my opinion, that from the improved victualling of the navy, and from the improved method of treatment, most ulcers can now be certainly cured, the generality easily; or at any rate prevented from becoming malignant, in the ordinary course of service at least. The cause of the frequent return of ulcers has been too little attended to, but is of such importance, that I trust to be excused repeating how much it is influenced by the plan of cure. When this has been weak, inactive, or improper, a cure, if at all obtained, is so long in taking place, that a habit is acquired, facilitating the recurrence of this evil from the most trivial causes: hence I have observed, that the same men have been put into the medical list, again and again, in the course of the year; and a great majority of ulcerated patients are ever found on inquiry to have had ulcer before. In this respect, ulcer is similar to dysentery; where these diseases have been of long standing, or have recurred two or three times in this country, they should be sent home. Yet these cases often seem trifling, and not unfrequently get well, or so far improve during the passage, as on their arrival to appear to have been invalided without sufficient reasons.

The state of the body has been too little attended to during the cure of ulcers. The digestive organs, the regularity of the bowels, and general habit, should be particularly enquired into, and any aberations corrected by aperients, tonics, stimulants, and alteratives. The importance of this, and the reciprocal influence of diseased actions are so fully illustrated in Mr. Abernethy's Treatise on "The Disorders of Health," as to preclude any farther observations here. Without taking upon me to decide upon the points of identity or diversity, in specific or particularly malignant, sphacelating, or obstinate ulcers, such as the phagedæna, and hospital sore, of Drs. Adams and Rollo; and those described by Drs. Trotter, Harness, Gillespie, &c. in the Channel, Mediterranean, East and West Indies; and without citing the experiments that have been made on healthy pus by Messrs. Hunter, Home, and many others, as contrasted with the specific, morbid discharges, examined by Drs. Crawford, Mitchell, Mr. Cruikshank, &c. I here merely beg leave to refer to those celebrated authorities, because from such a review I apprehend much may be found, or inferred, in favour of stimulating or active remedies.

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The fœtor of the hospital sore, Mr. Cruikshank found was most effectually destroyed by the nitrate and muriate of mercury, by the nitrous acid, and especially by the oxygenated muriatic acid, in the form of liquid, or gas: and Dr. Rollo was most successful in curing the same ulcer by these remedies, and the nitrate of silver. Dr. Mitchell treated foul, ill-conditioned ulcers with alkalies, with great success; and his theory of acidity, which led to their employment, whether admitted or not, does not affect their powerfully stimulating property. Dr. Underwood, I believe, recommends stimulants generally, for the cure of ulcers. The good effects of such applications in extremely painful and irritable venereal sores, might also be adduced in favour of this practice. The application of nitre to ulcers, highly extolled by the late Dr. Canning, I find was used in the naval hospital at Halifax, many years ago; and I was there informed, it was first tried by Dr. Paterson at the Cape of Good Hope. As it gives intense pain, and is mentioned without praise, I think it may well give way to other powerful and less distressing remedies. I have no experience of its effects in gangrene. Some writers, and particularly Mr. Whately and Dr. Underwood, have strongly recommended exercise during the cure of ulcers, while rest and a horizontal position of the limb, have been inculcated by the majority of practitioners, and especially by my much lamented friend, the late Mr. Benjamin Bell. The advantages of each of those modes in different states of ulceration, cannot, I think, be questioned; but generally speaking, I must give a decided preference to rest, because I have so very often found the cure greatly retarded, or altogether prevented, while men were permitted to walk about. In the active, inflammatory, or progressive stages, it is indispensable. By an horizontal position, and a cooling regimen, ulcers tending to malignancy may often be subdued in the beginning; while, on the other hand, in the chronic, torpid stage of ulceration, exercise may not only be innocuous, but in many cases highly beneficial, by improving the local and general health, and vigour of circulation. Neither the theory of a dependent posture, nor of a defect of vital energy, can therefore affect the propriety of exercise, or rest, in opposite states of ulcers.

I am happy to find my ideas on the treatment of ulcers in coincidence with those of a very able practitioner, Mr. M'Arthur, of the naval hospital at Barbadoes, who has transmitted

to you a most valuable paper on this subject, the result of much practical observation, and to whose recommendation, and diffusion of the good effects of spirituous and other stimulating applications, the cure of ulcers in the West Indies is much indebted.

Sept. 1, 1808.

Dr. Adams, *on the Digestion of the Stomach after Death, in Answer to Mr.* Burns.

NOTHING can be more agreeable to one who wishes to be understood, than to meet with objections, the answering which may tend to elucidate his opinions. It has often been remarked of polemics, that if two men, who mean well, could converse together for half an hour, however different they might fancy each other's sentiments, they would part satisfied with one another. If such is the case with controversies depending on the interpretation of words, how much more probable must it be where the whole depends on demonstrable facts.

Before entering on the particular passages of Mr. Burns's paper, in the last Number of the Edinburgh Journal, in which he has done me the honour to introduce my name, permit me to premise a few propositions, which should always be kept in view, while we attend to the digestion of the stomach after death.

1st. That the gastric juice is secreted in the stomach, in which cavity it reduces all digestible substances to a pultaceous mass.

2d. That the gastric juice does not, in the usual condition of the living body, digest the stomach itself.

3d. That after death certain parts of the stomach are sometimes found digested, or reduced to a mass similar to those substances which are affected by the gastric juice.

From these propositions Mr. Hunter first discovered that the property of this juice is to dissolve animal substances only when dead, which is further proved by the number of animals that live and grow in the stomachs of other animals without injury, but which, when dead, are soluble in the gastric juice of the same stomachs.

Spallanzani, with a patience that almost wearies his reader, made many attempts at dissolving the stomach by its own juice, but succeeded satisfactorily in none. He proved

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however two things, viz. that the process of digestion continues after death, and that the stomach is digestible. The first by introducing food into the stomach after he had killed his animal; and the second by giving the stomach of one dog to be devoured by another. In both cases he found digestion take place. This convinced him of two leading facts, which led him to admit the probability of Mr. Hunter's, though he never could produce them.

The following passage is extracted from Mr. Hunter's paper,* to show, amongst other things, the propriety of his remarks on the mode of conducting experiments, and also the difficulty of drawing just conclusions from their result, until we have detected every fact with its series and order.

" Spallanzani (says Mr. Hunter) made some experiments, to prove that digestion is carried on after death; but they are not so conducted as to correspond with the appearances in the dead body. An experiment, although it may be very well and accurately made, so far as the experiment goes, if it does not preserve a close connection with the purpose for which it was made, the conclusions to be drawn from it cannot correspond with the intention. This is exactly the case with the experiments of Spallanzani, which although they prove that meat was digested in the stomach after the animal was killed, (which no one doubted) yet are not at all calculated to show that the stomach itself may be digested. In fact, the mode in which they were managed, rather tended to prevent that effect from taking place, the gastric juice having substances introduced on which it could act, was less likely to affect the coats of the stomach. That the digestion was not carried on merely by the gastric juice secreted before death, is evident from his own account, some of the food which had been introduced and digested, being found in the duodenum; a thing that could not have happened, if a cessation of the actions of life in the involuntary parts had taken place when visible life terminated. There had been an action, and most probably a secretion, in the stomach. The only experiment that can be made with any probability of a decided result is, to kill the animal while the stomach is empty, and observe what afterwards takes place. There are very few stomachs that have not, when examined after death, some of the inner villous coat destroyed;

* Observations on certain Parts of the Animal Oeconomy, p. 131.

stroyed; which may have been done by the gastric juice in the ducts of the glands which secrete it."

I have always thought Spallanzani, in one particular, unfairly treated in this passage; for it is certain that the case which first attracted Mr. Hunter's attention, and which he relates with most minuteness, was of a man, who just before the accident by which his skull was fractured, "had made a hearty supper of bread, cheese, and ale." Upon opening the abdomen, he adds, "the stomach, tho' it still contained a good deal, was dissolved at its great end, and a *considerable part of the contents* lay loose in the cavity of the belly."

"The *second instance* (a term which might lead one to suppose that the appearances were similar) was in a man who died in St. George's Hospital, a few hours after receiving a violent blow on his head, which fractured his skull."* It is plain, however, by the above remark on Spallanzani, that Mr. Hunter did not consider a previous meal as necessary to produce these appearances. Mr. Burns is therefore not less polite than correct, when he says, 'Dr. Adams will, I trust, excuse me, when I point out an error he has committed. Mr. Hunter, in his observations, details the history of three examples, in which the stomach was digested. Two of the men died shortly after having their skulls fractured, and the third was 'a man who had been hanged."† Nothing can be more correct, but in the next passage Mr. H. seems to me not perfectly understood.

"Dr. Adams also appears to me (continues Mr. B.) to have drawn an inference from the two cases which he does notice, by no means warranted by the general tenor of Mr. Hunter's Essay. Although the individual cases which Mr. Hunter adduces to prove the fact of the solution of the stomach after death, were subjects who had been deprived of life by violence; still, in no part of his paper, does he limit the action of the gastric juice on the stomach, to such as have been killed by violence. Indeed, it is so much the reverse, that he inculcates, that there are few dead bodies in which the stomach is not in some measure dissolved. Nay, he declares, that 'there is frequently a considerable aperture made in this viscus, and, in many subjects, this digestive power extends much farther than through the stomach. I have often found that, after it had dissolve

* Animal Oeconomy, p. 187, note.
† Edinburgh Medical Journal, p. 130, vol. vi.

the stomach at the usual place, the contents of the stomach had come into contact with the spleen and diaphragm, had partly dissolved the adjacent side of the spleen, and had dissolved the diaphragm quite through, so that the contents of the stomach were found in the cavity of the thorax, and had even affected the lungs in a small degree."* I would here beg leave to inquire, is it probable, that one so accurate in his statement, and so faithful in his description, as Mr. Hunter must be allowed, even by his opponents, to have been, would have used such expressions had he merely seen the three cases which he particularizes. It is quite incredible, nor can I conceive how Dr. Adams came to fall into such an error. I have from Mr. Hunter's own paper proved, that he had really seen subjects having the stomach digested, besides these he has specified; but, as these cases were the first which came under his observation, they seem to have made the most lasting impression. From this circumstance, and from the manner in which Dr. Hunter wrote, many have embraced the opinion adopted by Dr. Adams, that solution of the coats of the stomach never does take place, except where the person has been suddenly deprived of life. Yet I do not conceive that Mr. Hunter either sanctions this opinion, or that he was the one who brought it into notice. We find nothing of this kind in his Essay, where it is clearly stated, that he had met with digestion in the stomach in some who had died a natural death. Can any thing be more explicit than the statement which Mr. Hunter gives, when he says, that for some time he was at a loss how to explain these solutions of the stomach, especially as "they were most frequent in those who had died of violent deaths." No man will believe that Mr. Hunter would have expressed himself in this way, if he had never met with an instance of digestion of the stomach, except after death from violence. Were this point merely of a speculative nature, and were its decision merely a matter of curiosity, I would consider the time employed in discussing it, as little better than mispent; but when I consider, that it is one on which the practitioner may be called upon to give his opinion, in a situation where that opinion may determine the fate of a criminal, I cannot but view it as an important question, which it is the duty of every one to elucidate to the utmost of his ability. This consideration, and having had some opportunity

* Hunter's Observations, p. 186.

opportunity of investigating this subject, has induced me to collect the observations which I had made during the dissection of those bodies in which I found the stomach digested. These observations have led me to conclude, that digestion of the stomach after death, is neither so rare in its occurrence as some have imagined, nor is it confined to such subjects as had been, previous to death, in a healthy condition; and they have also demonstrated, that other parts of the stomach, besides the large end, may be acted on by the gastric juice."*

In the above passage, Mr. Burns and I understand Mr. Hunter differently in two instances.

First, it appears to me "warranted by the general tenor of Mr. H's Essay," that he expected such a solution of the stomach, as amounts to a perforation only in animals who were killed by violence, and that in all these cases he discovered no appearance of blood-vessels; "*the edges of the opening*, says he, appear to be half dissolved, very much like that appearance which fleshy parts undergo when half digested in a living stomach."

Secondly, when "he inculcates that there are very few dead bodies in which the stomach is not, in some measure, dissolved," he adds, in his paper to the *Philosophical Transactions*, "and one who is acquainted with dissections, can easily trace the gradations from the smallest to the greatest.

"To be sensible of this effect, nothing more is necessary than to compare the inner surface of the great end of the stomach with any other part of the inner surface; what is sound will appear soft, spongy, and granulated, and without distinct blood-vessels, opake, and thick; while the other will appear smooth, thin, and more transparent; and the vessels will be seen ramifying in its substance, and upon squeezing the blood which they contain from the larger branches to the smaller, it will be found to pass out at the digested ends of the vessels, and appear like drops on the inner surface."†

This distinction of the two extreme degrees of digestion of the stomach, is of the utmost importance, and, in one respect, seems obvious, because no one would make Mr. Hunter speak of the digestion of the great end of the stomach *to perforation*, as so common, that there are very few dead bodies in which it does not occur.

* Edinburgh Medical Journal, supra.

† Observations on Animal Economy, p. 186.

The appearances so common, is of the stomach in *some degree digested* at the same end. In these instances, *the inner surface* only is digested, and so slightly, that only such an erosion in the extremities of the blood-vessels follows, that the blood may be squeezed out from the larger branches to those apertures made in the smaller. This superficial digestion, he conceives, "may be done by the gastric juice in the ducts of the glands which secrete it." But to produce the *perforation*, a larger quantity seems necessary, and for this purpose, we shall see some reason to believe that the animal must be killed in health, or in a condition copiously to secrete gastric juice.

It will hardly be suspected, that I should be less willing than Mr. Burns, to acknowledge the great accuracy of Mr. Hunter. But Mr. H. has taken great pains to show us that he considered his observations on this subject as by no means compleat. The penultimate paragraph of his paper, in the Philosophical Transactions, concludes thus: "Being employed, upon this subject, and therefore enabled to account more readily for appearances which had any connection with it, and observing that the half-dissolved parts of the stomach were similar to the half-digested food, it immediately struck me, that it was the process of digestion going on after death; and that the stomach, being dead, was no longer capable of resisting the powers of that menstruum, which itself had formed for the digestion of food. With this idea, I sat about making experiments to produce these appearances at pleasure, which would have taught us how long the animal ought to live after feeding, and how long it should remain after death before it is opened; and above all, to find out the method of producing the greatest digestive power in the living stomach; *but this led me into a boundless field.*"*

In the copy contained in his "observations," the last limb of the sentence is omitted; but in his preliminary remarks, published fourteen years after the paper appeared in the Transactions, he is still more careful to show how incomplete he considered his inquiries. "I shall conclude, says he, by adding a copy of the above-mentioned paper, in hopes that others will take up the subject in a more enlarged point of view."

I shall now, therefore, consider Mr. Burns as endeavour- to fulfil Mr. Hunter's wish, and myself as contribut- owards it. Permit me then to draw your attention ther remark of Mr. Hunter's, on Spallanzani's experi- contained in the above extract. "That the digestion,

* See the original paper in the Philosophical Transactions.

tion, says Mr. H. was not carried on merely by the gastric juice secreted *before death*, is evident from his own account, some of the food which had been introduced and digested being found in the duodenum: a thing which could not have happened if a cessation of the actions of life, in the involuntary parts, had taken place when *visible life terminated*. There had been an action, and probably a secretion, in the stomach."—— By this passage it is evident, that when Mr. Hunter uses the term *before death*, he means before the animal had received that violence which effectually prevented his recovering all those actions by which life is supported. This is confirmed by a subsequent expression, in which he speaks of "the *termination of visible life*." It will never be supposed that he considered the stomach dead, whilst it was performing its customary functions of secretion, and of propelling the digested food to the duodenum. The objection therefore against Spallanzani's conclusion should have been: That it is contrary to his [Mr. H's] theory to expect the stomach should be digested whilst it gave proofs of being still alive, and that, in all probability, its death was so gradual, that secretion had ceased before the extinction of life.

Here then we see the reason why the digestion of the stomach, to any considerable degree, rarely takes place even in animals who die a violent death, and also why "there are very few stomachs that have not, when examined after death, some of the villous coat destroyed, which may have been done by the gastric juice left in the ducts of the glands which secrete it." For however suddenly, or by whatever violence, *visible life* may have *terminated*, if the *actions of life in the involuntary parts* continue, those parts must have retained their life, which would gradually cease; and if death is the consequence of disease, the quantity of gastric juice is likely to be small, and probably the last portion secreted may, for want of power to propel it, remain in the glands, or their ducts, till the very parts which secrete, and should forward it, shall be in a condition to be digested by it.

This is, I hope, enough to explain the manner in wh[ich] the superficial digestion of the stomach, in its muc[ous] membrane, so generally takes place in every mode of d[y]ing, provided the body has been kept, and is examin[ed] after the stomach has lost its life.

It now remains to show the circumstances under w[hich] the whole thickness of the stomach shall be dige[sted]

ot only the contents found loose in the abdomen, but ven parts of the viscera, in contact with the perforated art of the stomach, shall be digested also.

This reduces the whole to the following question: If the tomach can only secrete whilst living, and only be digested when dead, how can it be digested by its own uice? The only answer must be, that the juice which it ecreted during life, has become its solvent after death. he question then returns, Why is not the stomach digested in all animals killed in a state to secrete gastric juice? It annot be accounted for by saying that the juice is expended in the digestion of food already in the stomach; ecause we have so many instances on record, in which the tomach has been digested before the food, and so indeed we might expect, because the juice must be more immediately applied to the surface of the stomach, and part of it is probably contained in its very substance.

In this, as in most other cases, we must begin by ascertaining the precise meaning of the language we use.

"I shall divide violent deaths, (says Mr. H. in his paper on persons apparently drowned)* into three kinds: First, where a stop is only put to the action of life in the animal, but without any irreparable injury to a vital part; which action, if not restored in a certain time, will be irrecoverably lost. The length of that time is subject to considerable variation, probably depending on circumstances with which we are at present unacquainted. The second is, where an injury is done to a vital part; as by taking away blood till the powers of action are lost; or by a wound or pressure on the brain or spinal marrow, sufficient life remaining in the solids, if action could be restored to the vital parts. The third is, where absolute death nstantly takes place in every part, as is often the case in trokes of lightening; in the common method of killing els, by throwing them on some hard substance, in such manner as that the whole length of the animal shall reive the shock at the same instant; and, as, I believe, appens by a blow on the stomach; in all which cases the uscles remain flexible."

he last state is that which we have to consider, where *y part is instantly killed.* In the two former, the indivi-al parts retain life; and if in the first, action could be re-ed, or in the second blood restored, or the causes of ... are removed, the animal might be recovered. But in the

* Observations, &c. p. 117.

the third, absolute death instantly takes place in every part; one proof of which is, that "the muscles remain flexible." In this only then is the stomach killed at the moment when it was in complete health and secreting freely.

We have seen, that after visible life is terminated, in most cases the individual parts retain their life for a certain time, various, according to the circumstances of death. The proofs of this are, that the muscles afterwards stiffen, that the blood is thrown from the arteries to the veins, and that it coagulates, and in some instances, we can perceive a continuation of the peristaltic motion. In this state, therefore, the stomach retains its life, and is consequently indigestible whilst the digestion of food continues as before, and even the peristaltic motion.

This we know is the most ordinary mode of death, and therefore accounts for our so seldom seeing the stomach digested through its whole substance. But in animals killed by lightening, it is found, that the muscles do not stiffen, the blood does not coagulate, and that putrefaction soon follows. There are other circumstances, under which the same mode of death happens, but they are more uncertain. However, the proofs in all are the same, viz. that the muscles do not stiffen, that the blood does not coagulate, and it is not thrown from the arteries into the veins. If an animal in previous health shows these last mentioned appearances after death, and has food in his stomach, we shall find the stomach digested, and its contents in the cavity of the abdomen.

I have taken the strongest view of the subject, but it will be allowed, that there are intermediate stages. Animals sometimes stiffen almost immediately after death, and become as quickly afterwards flexible. This is frequently the case in very hot weather, and in hunted animals. Here the process to absolute death in every part comes on so quickly, that the same event may happen to the stomach, though in a less degree.

An animal may die in such a state, that his appetite is considerable immediately before he ceases to breathe, even if his death has been unattended with violence. Such is sometimes the case in phthisis pulmonalis, when after a more than usual exertion of any kind the patient suddenly ceases to breathe; it happens still oftener in psoas and other large abscesses. Yet in these cases, to use Mr. Hunter's expression, though "visible life is terminated," yet the component parts retain life for a time, as is evide[nt]

the subsequent stiffening of the body. Digestion therefore still continues, and the peristaltic motion also. The time of their continuance must depend on circumstances attending the mode of dying, which will vary with the season of the year and other causes which cannot be exactly ascertained. Hence, the food in a certain state of digestion may be propelled to the pyloric end of the stomach; or gastric juice may be propelled, unsaturated with food; and should this have occurred just at the time when the stomach loses its remaining life, that part with which the gastric juice is in contact will be digested. Should the life of these parts continue longer, a portion of unsaturated gastric juice may be propelled by the peristaltic motion, till it rests on a part of the intestine, which will in that case be perforated. This is by no means an uncommon case.

More than twenty years ago, I was present at the dissection of a subject, in which one practical anatomist used the knife, and another inspected. The former, who had seen the case during life, was much surprised at meeting with a perforation in one of the intestines, though none of the previous symptoms indicated disease in those parts. The other gentleman suspected it was an accidental cut; but on examination, it was found, that the inner substance was gradually thinned all round the hole. Many of these appearances are mentioned by other authors, particularly, as well as I can recollect of dissections in warm climates. I cannot venture from memory, to name any but Dr. Blane, whose valuable work on the Diseases of Seamen, I have so often turned over, as to enable me readily to point out the following passage. "The body, says he, of one of the men who died of this fever, was inspected at the hospital, and there was found to be inflammation, and even perforation of the intestines, without any previous symptoms that could lead to expect such an appearance; a circumstance more likely to happen in the former sort of fever than the latter."* As it does not appear that Dr. Blane was present at the dissection, I need not add how uncertain the proofs of inflammation are when related by those who are not much accustomed to examine dead bodies.

We are obliged to Mr Burns for other valuable histories, in which he found every part of the alimentary canal dissolved into a pulpy gelatinous mass. If I understand him, however,

* Blane's Diseases of Seamen, p. 137.

however, the parts seem to have retained their figure, as they "tore when gently touched." This is somewhat short of that complete solution which takes place in that part of the stomach, through which the contents have passed. I leave it to his judgment tod etermine, whether these events may be accounted for thus. The subjects, he tells us, were young children, fat, free from putrefaction, and in whose bodies nothing could be distinguished to account for death. It is therefore presumable, that they were in health a short time before death; perhaps died in some violent paroxysm of convulsion from teething, or some other cause. As no putrefaction had taken place, might not the peristaltic motion have gradually propelled gastric juice and food, in a certain stage of digestion, along the whole canal, leaving sufficient in the plicæ to produce this effect after the life of the intestines had ceased. It would be easy to suggest many other arguments in favour of this opinion; but as the cases are Mr. Burns's, I shall leave them in his hands.

All this may therefore be considered as conjecture; but that the digestion of the great end of the stomach is caused by the union of the events before mentioned, is readily reduced to proof; in an animal of all others the most convenient for experiment, and the fittest for this in particular.

It is well known that rabbits keep a shorter time than most other animals killed for the table. That is, absolute universal death takes place, and the muscles become flexible, or never stiffen. If a rabbit is taken from the hutch in summer, about noon, and instantly killed with dexterity, the probability is, that it will not stiffen, and if it does not, that the stomach will be digested. If another is killed late in the evening, should stiffen, and the blood coagulate, the stomach will not be found digested.

I hope I shall not be so far misunderstood, as to be accused of asserting that these modes or times of killing will always be attended with these effects. The probability is, that by the first mode and time of killing, the animal will not stiffen, yet this cannot be ascertained, and if it does stiffen, we are not to expect that the stomach shall be digested. All that can be said is, that this mode and time of killing succeeded in my experiment; and if those who repeat it find that the animal stiffens for any length of time, the experiment must be repeated till one is killed in such a manner that no stiffening takes place, or that the body very soon becomes flexible. A more particular account of

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Mr. Brookes's and my own experiments is given in the preliminary remarks to "Observations on Morbid Poisons," to which Mr. Burns alludes.

I cannot conclude these remarks without expressing the pleasure I felt at perusing Mr. Burns's paper. For some time past, a number of medical writers, or perhaps, the same writers in different periodical publications, seem to have found great pleasure in amusing the public at the expence of the authors whom they notice. If their intention is only to render their works popular, it were to be wished that they would be more sparing of their severity to young authors, whose feelings may be more acute, and some of whom are, perhaps, scarcely known till they appear before the world under all these disadvantages. When an author has been some years before the public, the discerning part, who always maintain a certain degree of influence in general opinion, will bring him to his proper level. To such, therefore, it is of less consequence if the arrangement of his work is overlooked, or purposely misrepresented:—if allusions to objects the most familiar, which are selected as the means of illustrating new doctrines, should be quoted without reference to such illustrations, and produced as proofs how ready the author is at telling what every body knows:—if expressions, dictated in the warmth of friendship or gratitude, unconnected with argument, and however sparingly introduced, should be carefully selected and produced as inconsistent with solid reasoning:—if the blunders of compositors in the dead languages, after reiterated corrections; or still less important errors in a living language, should be produced:—in a word, if all these minutiæ of a publication should be dwelt upon, whilst the division and arrangement, the chain of arguments by which new opinions are supported, and every thing else which can interest the reader, is carefully omitted, an old author will be ready to impute the whole to the impatience of one class of critics.* But it is to be wished, if this style of criticism

* See Swift's Battle of the Books — Soliloquy of Criticisms. "It is I, who give wisdom to ideots and infants; by me, children grow wiser than their parents; by me, beaux become politicians, and school boys judges of philosophy; by me, sophisters debate and conclude upon the depths of knowledge; and coffee-house wits, instinct by me, can correct an Author's style, and display his minutest errors without understanding a syllable

cism is necessary to render a book more saleable, that it should be chiefly directed against us, who are best able to bear it.

After this transient view, it is with increased satisfaction that I return to Mr. Burns, whose paper is written in such a manner as to afford some prospect of politeness even in medical controversy. Should he think these Remarks worthy his notice, there is only one hint I shall take the liberty of offering, which, from the tenor of his writing, there is no doubt will be well received. It would be desirable when one writer thinks it proper to notice another, that he should always fancy himself conversing.—I shall now, therefore, suppose Mr. Burns asking, "What induced Dr. Adams to conceive it is only under circumstances of violent death, that Mr. Hunter found the stomach digested?" To this, my answer should be, that I feel greatly obliged to Mr. Burns, for pointing out my error. That it must be admitted, Mr. Hunter does not say, "the stomach could only be digested under circumstances of sudden death;" but by the passage already quoted, we have seen that he "set about making *experiments* to produce these appearances at pleasure." To the preceding paragraph of the same paper, in which he tells us, that he found the appearances most frequent in those who died a violent death, a note is added, which contains the only instances he any where relates of its occurrence in the human subject. These all died violent deaths, and in one of them the stomach was previously in the act of digesting food. In his experiments on other animals, the same may be traced. "In some, says he, I perceived the appearances above described. For, pursuing the inquiry about digestion, I procured the stomachs of a vast variety of fishes, who usually die of violent deaths, and may be said to *die in perfect health with their stomachs commonly full*; and in many of these I found that the digesting part of the stomach was reduced to the same dissolved state as the digested part of the food."*

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a syllable of his matter by me, striplings spend their judgment as they do their estates, before it comes into their hands.—But come, my aged parents, [Ignorance and Pride,] and you my children dear, Noise, Impudence, Dulness, Positiveness, Vanity, Pedantry, and Ill-manners; and you, my sister Opinion, let us ascend my chariot."

"The goddess and her train mounted the chariot, which was drawn by tame geese," animals admirably chosen for the purpose, by their disposition to hiss and cackle indiscriminately at every thing they meet.

* Observ. p. 187.

These passages, though not sufficient to show that "Mr. Hunter saw the animal must be in health immediately before death," may be some apology for the error of one who being himself prepossessed with the opinion, might be too forward in seeing the same in others. For this reason, I can easily believe Mr. Burns having entertained a different opinion, felt all the surprise he expresses.

As a further apology for myself, permit me to transcribe a passage from an author of the highest authority in matters relating to appearances in dead bodies, and whose familiar habits with Mr. Hunter must have furnished particular advantages in tracing the opinions of his relation and friend. Though Dr. Baillie writes with greater caution, yet it is easy to see how much he conceived a sudden or violent death, and by implication, food in the stomach, as necessary to produce *a perforation* of that organ by digestion.

"In looking upon the coats of the stomach at its great end, a small portion of them appears frequently to be thinner, more transparent, and feels somewhat more pulpy than is usual; but these appearances are seldom very strongly marked. They arise from the gastric juice resting on that part of the stomach in greater quantity than on any other, and dissolving a small portion of its coats. This is therefore not to be considered as the consequence of a disease, but as a natural effect, depending upon the action of the gastric juice on the coats of the stomach after death. When the gastric juice has been in considerable quantity, and of an active nature, the stomach has been dissolved quite through its substance at the great end, and *its contents* have been effused into the general cavity of the abdomen. In such cases the neighbouring viscera are also partially dissolved. The instances, however, of so powerful a solution are rare, and have almost only occurred in persons who while in good health had died suddenly from accident. If the powers of the stomach were little impaired by diseases, this appearance of the stomach after death would be very common. As, however, they are very much injured by most diseases, and by many are totally destroyed, this appearance very seldom takes place. The true explanation of these appearances was first given by Mr. Hunter, and published at the request of Sir John Pringle, in the Phylosophical Transactions."

Before I conclude, there are two other instances of candour in Mr. Burns's paper, which I wish to notice, as they are very likely to be overlooked by readers less interested

ested than myself. He tells us, p. 135, that he laid the body aside in a cold situation for two days, yet that digestion continued; and at the conclusion, "that he never observed an occurrence of this kind, (solution of the bowels) but in the summer months."—If this is meant as a delicate mode of confuting one of my opinions, and a polite manner of confirming another, I shall admit that in my paper, the summer season and the warm part of the day are considered the most favourable for making such an experiment. In this, my only intention is, to show that such a temperature is more favourable for hastening those actions which induce universal death in every part. It is well known that t e gastric juice retains its property in every temperature; if therefore the stomach is dead, there can be no necessity for warmth to produce its digestion.

To Dr. BRADLEY.

Dear Sir,

HAVE the goodness to insert in your next Medical and Physical Journal, the following account of Scarlatina Anginosa, as it has appeared in this country during the greater part of last winter. My principal object in this short memoir is, to draw the attention of practitioners to the great advantages to be derived from cold affusion in the treatment of that disease. Some of your Readers may be pleased to hear an account of this epidemic as it appeared in the neighbourhood of Johnny Grott's House.

On SCARLATINA ANGINOSA.

By Mr. W. H. Torrence.

NO description of this disease, which has fallen into my hands, applies so perfectly to that form of it which appeared in this county in the end of the year 1809, and beginning of 1810, as that given in the Lectures of the late learned and indefatigable Professor Burserius de Kanifield. Sydenham, indeed, has given, in his usual masterly manner, a history of the phenomena of one form of this disease, the Scarlatina Simplex; but it does not appear that this accurate historian of disease, and minute observer of symptoms, ever had an opportunity of observing

ing it under the form of scarlatina anginosa, otherwise, it is not to be believed that so prominent a symptom as the affection of the throat would have escaped his notice.

He describes the disease as one of the mildest in its nature, requiring for its management little more than the common attentions to rest and quiet, and seems to fear worse consequences from the "nimia medici diligentia," than from the effects of the disease itself.

Doctor Cullen, it is well known, considered scarlatina and cynanche maligna as different diseases, and accordingly, in his nosological arrangement, has placed the latter in the order Phlegmasiæ, and not in that of Exanthemata. Such distinction, however, seems now to be very generally abandoned.

"It seems highly probable that these are both names of the same distemper, with some little variety in a few symptoms: and this opinion is confirmed by our finding that they are both epidemical at the same time." Vid. Heberden's Commentaries, cap. 7, § 2.

During the prevalence of the present epidemic, I have had repeated and almost daily opportunities of ascertaining the identity of these two forms of disease, and am satisfied that they stand in the same relation to each other, as the distinct does to the confluent small-pox, differing only in degree, and both deriving their origin from the same contagion.

Sydenham observes, that this disease commonly makes its appearance in autumn. In this instance, however, the epidemic first shewed itself about the close of winter, or at least did not become frequent till about the middle of January. One solitary case, indeed, I first visited on the 28th of October, 1809. It is to be observed, however, that the winter in this country was more than usually mild, and, in many respects, bore a considerable resemblance to the weather and temperature which commonly prevail in the end of autumn.

In most cases, the disease was ushered in with the usual symptoms of pyrexia, mild however in degree. Slight rigors, or at least some sense of cold, most frequently in the back and loins; head-ache; sometimes a degree of vertigo, were complained of. The tongue at first little changed from its natural and healthy appearance; but as the disease advanced in progress, it assumed a whitish cream-like covering. The pulse was not greatly accelerated; urine scanty, and of a deep brown colour.

On the third, fourth, or fifth day, the scarlet efflorescence

cence made its appearance, most commonly first on the face, neck, or chest, to which parts, in some cases, it was altogether confined. In others, however, it gradually extended itself over the whole body and limbs, giving the whole person, in some instances, a pretty close resemblance in colour to that of a boiled lobster. The colour, on pressure with the hand, immediately disappeared, leaving the skin remarkably white, but, on removing the pressure, it almost as immediately returned.

In the course of two or three days, the colour began to fade, and a mealy or branny desquamation of the cuticle took place. At this stage of the disease, a slight degree of œdema of the face or ancles sometimes occurred.

Such was the history of the milder cases of this epidemic; and in such cases, I have no doubt the patient was safe, even in spite of the "nimia medici diligentia." In other cases, however, a more formidable train of symptoms was to be combated. The common symptoms of pyrexia, at the commencement of the disease, were attended by great dejection of mind, and apprehensions of death; deep seated pain at the back part of the head; stiffness and rigidity of the muscles of the neck; a sense of fullness in the throat; difficult and painful deglutition; pains in all the limbs; great lassitude and inaptitude to motion, indicated the approach of the worst form of the disease. In such cases the pulse was feeble and greatly increased in frequency, while the countenance exhibited, by the shrunk and flaccid features, that fear of dissolution which so frequently occupied the mind of the patient. The skin in every case was hot, but not hard, and in some the heat, as measured by the thermometer, was so high as 106° of Fahrenheit.

On examining the throat, the tonsils were found considerably swelled; in some covered with small grey coloured specks, but in others with brown coloured sloughs, discharging a sanies of most offensive odour. In several instances which fell under my observation, this slouging extended itself from the amygdalæ into the meatus auditorii, through the Eustachian tube, discharging the same offensive sanies from the external aperture of the ears. In one unfortunate boy, whom I attended, I believe the organs of hearing to be completely destroyed by this cause. In other cases the sloughing proceeded from the velum pendulum palati into the passage to the nose, and a similar offensive sanies was discharged from the nostrils.

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The practice I followed in the treatment of this disease, was extremely simple, and I have the satisfaction to say very successful.

By referring to my notes of this epidemic, I find I have attended seventy-three cases, all of which have terminated favourably. Of this number sixty-five were subjected to the affusion of cold sea-water; which was done by placing the patient on a low seat, in the middle of a large tub, and pouring the water, to the quantity of at least two English gallons, on the head and shoulders, so as to flow all over the body and limbs of the patient. The patient was then wiped dry, and immediately put to bed. The affusion was repeated as often as the return of severe head-ache and increasing heat of surface seemed to render adviseable, seldom oftener than morning and evening during the continuance of fever.

The uniform effect of the affusion was a decrease of fever, relief from distressing head-ache and pain of the limbs, followed soon after by quiet and refreshing sleep. So fully satisfied were my patients of the efficacy of this seemingly harsh measure, and so sensible of the relief they experienced from it, that it was not unusual for them to have recourse to this powerful remedy on their own accord, on the re-accession of heat and febrile uneasiness.

Of the sixty-five cases treated with the cold affusion, the disease in nineteen was completely cut short on the second or third day of its duration; in all of them, the advantages derived from it were obvious and decided. Depression of spirits was succeeded by the cheering influence of hope; head-ache and febrile heat of surface were removed, and the patient looked forward to a recovery, of which no doubt was entertained.

The remaining eight of my patients were either in so advanced a period of the disease before I first visited them, or laboured under such affections of the chest, as rendered the propriety of this treatment doubtful. In some of these, however, tepid bathing was used with very decided advantage.

In the application of the cold affusion, the very judicious and pointed directions of the late Dr. Currie, to whom medical science owes so much, were strictly attended to; "*when there was no sense of chilliness present, when the heat of the surface was steadily above what is natural, and when there was no general or profuse perspiration.*"

Thus the repeated use of the cold affusion, the application of a stimulating epithem to the throat, occasionally a blistering

blistering plaster, attention to the state of the alvine discharge, as recommended by Dr. Hamilton, in his Observations on Purgative Medicines, constituted almost the whole of my practice in this epidemic. No bark was given in any stage of the disease; but in some of the worst cases, a little wine was recommended during the period of convalescence.

I take leave to remark here, that those gargles, so much recommended by many physicians, were, in bad cases, totally inadmissible. No gargle, whether in the common manner, or thrown in by means of a syringe, could be used without the most imminent danger of suffocation. I found, however, an excellent substitute in the following simple formula.

℞. Acet. distillat. ℥ij. Aq. fervent. ℥iv. M. et inhaletur vapor, medii et grati caloris, more solito.

It was remarkable that anasarcous swellings more frequently supervened after mild cases of this disease, than after such as in their progress had assumed a more formidable appearance. These swellings, however, readily yielded to a few doses of calomel and jalap.

If this short memoir shall have the effect of calling the attention of practitioners to the use of this powerful remedy in scarlatina anginosa, my object will be fully answered.

Thurso, County of Caithness,
April 6, 1810.

To the Editors of the Medical and ... cal Journal.

Gentlemen,

As Dr. Hamilton, in the last Number of the Medical Journal, has requested communications from your Correspondents, relative to the pernicious effects of ipecacuanha, I am induced to send you the following fact.

Mrs. D——, a near relative of mine, and wife of Mr. T. D——, surgeon and apothecary, at Winborne in Dorsetshire (to whom I was an apprentice) was, during some years of the early part of her marriage, subject to most violent and frequent attacks of dyspnœa catarrhalis, which (not being relieved by any means that could be devised) rendered her situation truly miserable; at length Mr. D. ac-

accidentally met with an old magazine, in which a similar case of the wife of another medical man was recorded; and which was found to have been occasioned by the effluvia of ipecacuanha. It soon appeared (by experiment) that Mrs. D——'s complaint arose from the same cause; and from that time (the greatest care being taken in the use of the drug) she was freed from the disease; I however recollect, that frequently when it was used in the house, although she was at a distant part of it, she would be aware, from her sensation, of what was going on.

I am, &c. WILLIAM TOWSEY.

Lymington, April 9, 1810.

CRITICAL ANALYSIS

OF THE

RECENT PUBLICATIONS

IN THE

DIFFERENT BRANCHES OF PHYSIC, SURGERY, AND MEDICAL PHILOSOPHY.

A Scientific and Popular View of the Fever of Walcheren and its Consequences, as they appeared in the British Troops returned from the late Expedition; with an Account of the Morbid Anatomy of the Body, and the Efficacy of Drastic Purges and Mercury in the Treatment of this Disease. By J. B. DAVIS, M. D. one of the Physicians appointed by the Medical Board to attend the Sick Troops returned from Zealand. 8vo. 224 pages. London.

A MORE important subject than the fever of Walcheren cannot well be fixed upon by the physician for investigation, whether he considers it with respect to its source and origin in soil and climate, in order successfully to resort to prophylactic means against its invasion, or examines the nature, tendencies, and diversified phenomena of the fever itself, both with a view to reduce it to a mild and manageable type, as well as to avert the complicated and fatal consequences of one of the direst diseases that ever appeared in any temperate region. Dr. Davis has imposed upon himself a task of difficulty, though of great public moment, in undertaking to lay before the world an account of a disease, that has, from its unexampled violence and fatality, called forth the attention of men distinguished in medical science. Nevertheless, he has accomplished his object with that success and credit to himself, which cannot fail of making his work a valuable and acceptable present to others. It is necessary, for the information of every practitioner in our own age,

age, and of ages to come, to be in possession of a record of the Walcheren fever and its consequences, both with a view to trace its analogy with the fevers of the marshes of Lincoln, Kent, and Essex, and to judge of the efficacy of certain remedies for their removal. Sir John Pringle and Cleghorn have described the symptoms and appearances of remitting and intermitting fevers with accuracy, but they are both defective in minutiæ, and, above all, in that very interesting and useful part, the dissections, which our author presents us with in a particular and general manner. In this interesting work, we have pleasure in saying that we discover skill, perspicuity of expression, and a spirit of investigation which pursues its aim with energy. In it we moreover find many ingenious views of several diseases arising out of the primary fever, and incidental remarks which reflect credit on the author's judgment and learning.

A work of the above description is much wanted, on account of the scantiness of our present information on the Walcheren fever, and the discordant statements hitherto given, leaving the philosophic mind but little reason to be satisfied, and affording it but little ground for reflection. We are glad that the ideas which the author imparts to his readers, do not appear to have carried him beyond the limits of his personal experience, which seems every where corrected by his own good sense and acute observation. Dr. D. is already known by his French work, on the diagnosis of death and precipitate burial, and in the literary world by his History of Nice, &c. &c.

The author begins this work with an ample introduction on the Medical Topography of Zealand, and considers philosophically all the local and general causes which conspire to render the island of Walcheren so insalubrious. "Much of the tendency to disease in Zealand, and in Walcheren, seems to depend on local causes on its sea-line; for it has been confidently asserted by several writers that there is a peculiar species of damp exhalation, which rises from the slime and mud laying on the beach, during the recess of the tide, and which has been thought more liable to produce bad effects, (for moisture always debilitates the body, and disposes it to disease,) from some chemical causes supervening from the mixture of the drainings of the land with the salts deposited on it, and, perhaps, with a portion of that putrescent phosphoric matter, which is known at times to be copiously distributed over the surface of the ocean."

Many curious circumstances are noticed, whereby the unhealthiness of the season may be detected, by observing the degrees of moisture beneath and upon the surface of the soil. He shews, (what few persons are inclined to deny) that bad water, exposure to inclemencies of the weather, fatigue, and moisture, all concurred to predispose the troops to fever, but that marsh miasmata were necessary to call the disease into action. The unhealthiness of the island of Walcheren, he evidences in the constitutional cha-

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racter of the inhabitants. "The general constitution of the adult here, is that to which ancient physicians have given the name of phlegmatic. The organization, in short, is feeble, the complexion sallow, the body bloated, and frequently anasarcous, and all the grand functions of life are weakly and incompletely performed. The women, like the men, have a natural weakness of constitution, and become old at an early period of life."

Here follows from the public documents, detailed reports of the sick, their state at Colchester and Ipswich, and a narrative of the author's appointment. He has seen the same fever in some French troops at Argues Martes, and in Piedmont.

We learn at the conclusion of the introduction, and in the two first sections, that the common type of the Walcheren intermittent, as it appeared in England, was the double tertian, and meet with some interesting inquiries into that very important point, the appearance of the fever, posterior to the arrival of the sick on our own shores. The author conceives this to be rare. He does not, however, deny that it may declare itself in individuals returned to England, who were well while abroad; and admits that there is no fixed period for marsh miasmata to operate on the system, of which the instances wherein the fever has not appeared till after the return of the troops to England, are proofs. "There is not that I know of, any particular and definite period for the reception of marsh exhalations into the system, and their action upon it. They have occasionally been found not to operate until weeks after the person has been exposed to their influence. There are certain symptoms, which, were they accurately noticed, such as debility, an oppressio virium, nausea, and head-ache, with which men were frequently seized before the fever appeared, indicative, in my opinion, of the difficult admission of the miasmata into the system, which seemed to await for some favorable change; as that, for instance, occasioned by exposure or irregularity of any kind, that would favour their entrance into, and operation on it. In every instance of disease, as far as I could ascertain, that fell to my lot to inspect, remission or intermission of the fever more or less evident, occurred, and I was left ignorant of this, its true appearance and character, from the imperfect representation of the sick; it was usually confirmed in the presence of those consequences which it is known invariably to entail. Admitting, however, that the fever had not, in every case, manifested itself in Walcheren, it merely proves, that with a predisposition existing after the application of the exciting cause, the constitution, under particular circumstances, had the power of suspending the action of miasmata for a time, but ultimately yielded to their influence when such a power ceased to act."

The author proceeds to give a definition and explanation of the type of the fever, first observing, that it assumed the quotidian, tertian, double tertian, quartan, and even remitting type; of all these, the double tertian was the most common, frequently forming the *anticipating and retarding intermittent*, by the hastening or pro-

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traction of the return of the exacerbations. "Sometimes a period of the fever," he observes, "was regular, that is, during the period there was but one paroxysm and one interval." Generally, however, he says, "instead of one paroxysm and one interval in each period, there were two intervals and two paroxysms, differing, however, materially, as to the violence and duration of symptoms, the hours of invasion, time of decline, and termination." He mentions, "that this type variously anticipating and p stponing, gave a peculiar mixed character to the disease, rendering it anomalous in nature, and tedious to the practitioner to treat." He remarks too, "that there was a variety of the disease, in which, on one day, there were two paroxysms, and on another, only one, while in other species of the fever, there has appeared to be a constant succession of paroxysms, one beginning as soon as a preceding o e had ended." The author shews that the fever anticipated so much in some cases, that so many hours were gained, as to give a new character to the type, and even to make it resemble remitting more than intermitting fever. He dwells with great exactness on its irregular tendencies, and shews discernment in representing all the varieties of the double tertian type. The author confirms the observation of Clark, Fordyce, and Cleghorn, of the retarding paroxysm frequently failing to return in the night time, and of occupying again, in succession, the diurnal hours as before; a circumstance that he thinks contributed to change and modify the type anew.

In the next place, the author enumerates the irregularities which occasioned the double tertian type to change its course, and to become confused. Amongst these, we *find debility*, prolongation of the paroxysm, and visceral disease mentioned. He considers that these were the principal causes of such accidents, and very rarely an inflammatory diathesis. When, however, this did prevail, its force seemed much directed against the viscera of the abdomen, constituting a disease which the ancients called *assodes*.

The following section is devoted to an investigation of particular phenomena. The author's observations on the pulse are ingenious, and contain an account of various distinctions in the pulsations of the artery, which are applicable to the subject of fever in general.

The inferences he draws from the state of the brain, the tongue, the skin, the bowels, from external signs, and various phenomena, the secretions, &c. are all deserving of the highest consideration, and aid materially in forming a true prognosis. The whole of these are interspersed with appropriate illustrations. In the pathological view of the fever, the author takes some pains to shew that through the medium of nervous agency, marsh miasmata may produce vascular derangement, and this, at length, terminate in plethora of the venous system, which the author is inclined to believe is the cause of the torpor that precedes the exacerbation. "That venous plethora seems to have its origin in diminished nervous energy, is rendered probable by the dejection of spirits, the loss of muscu-

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lar power, and the general debility which attend this fever in all its stages; also by the tendency there is in certain parts to be attacked with spasm when this disease inclines to a fatal termination. Such appears to me to be the cause of congestion in those organs whose vascular system is almost wholly venous, and in which the circulation is naturally slow, and liable to interruption." The author admits that torpor may be also occasioned by debility; but as he always found the venous system turgid with blood, at whatever period of the fever the patient died, he conceives this plenitude may, in its turn, become a cause of torpor, and ultimately of a paroxysm. The ratio symptomatum is methodical and excellent.

The predisposing, concurring, and exciting causes, occupy another section; after which, the treatment of the fever is noticed. This, the author comprises principally under the head of tonic, purgative, and mercurial. We refer the reader to the numerous remarks he has made on cold affusion, tobacco, opiates, ligatures, emetics, bleeding, and various other expedients, to shorten the fit, and render it less violent. The numerous complications of the fever, and its combination with visceral disease, rendered bark a very ineffectual, nay, sometimes an injurious remedy. The author found there was no security against a relapse, nor any hope indeed of recovery, but where mercury was had recourse to, and persisted in for a great length of time, until all induration and vestige of visceral disease were removed. He also considers the efficacy of drastic purges so great, as even to rival the power of mercury in many instances. Upon this subject, he observes, that "far from thinking that drastic purgatives proved ultimately injurious, by favouring relapses, as Fordyce and Gregory the elder, pretend: I have no hesitation in saying, that when they were repeated at proper intervals, they not only diminished the tendency to relapse, but carried off the congestion of the abdominal viscera when other remedies failed; and proved the most effectual preventive of dysentery, arising from chronic inflammation of the intestines, a state that first induced diarrhœa, and always ended in that disease." He says too, "I am inclined to think that drastic purgatives, in a great number of instances, as the cases I shall insert will shew, were often more serviceable than mercury, in diseases of the spleen, liver, and intestines." Again, "I invariably found that those cases which were treated with drastic purgatives, were rendered milder and more tractable, and ceased infinitely sooner than the others: nay, I observed that while some patients were sinking under the use of bark and mercury together, others taking purgatives and mercurials were fast regaining health." The author condemns the indiscriminate and free use of mercury, and thinks that much harm has arisen in the practice of medicine, from doing what is quaintly called *pushing the mercury*. He condemns bleeding, except in particular cases. Observations then follow, on the employment of the auxiliary remedies, iron, nitric acid, and sulphate of copper. It is not in our power to make extracts of his remarks on all the vari-

ous

ous remedies he employed. We must, therefore, again request the reader to supply this deficiency, by a reference to the work itself.

From the treatment, the author proceeds to speak of the dreadful consequences entailed upon the constitution by the primary fever, which, independent of organic disease of the liver, spleen, and other viscera, we find to consist in diarrhœa, dysentery, ascites, anasarca, hydrothorax, hydrops-pericardii, anasarca pulmonum, dropsy of the brain, and jaundice. He takes occasion here to consider in a very ample manner chronic dysentery, which he refers to his favourite theory of venous plethora of the abdominal viscera, and sometimes to a vitiated quality of the bile, which to us appears to be the best founded opinion. He supposes that dysentery may originate from the same cause as fever, (which few are inclined to contest,) and dwells upon the success that attended the use of drastic purgatives in averting this worst and most irremediable termination of the disease. He mentions that the diarrhœa which preceded chronic dysentery, was only to be removed by drastic purgatives. "I was latterly so satisfied of the efficacy of drastic purgatives in these chronic diarrhœas, accompanied with obstructions of the liver and spleen, that I, at their first developement, instantly proceeded upon this treatment, and do not entertain a doubt, but that I frequently thus prevented dysentery from supervening." Patients either died dysenteric, dropsical, or expired from debility. It was no uncommon circumstance for a protracted and violent paroxysm to be followed by a sudden effusion in the chest, in which case the fever had rather a continued form than the intermitting type. "But the phenomena indicatory of effusion in the thorax, have not always come on gradually, and been combined together; for they sometimes, after a severe paroxysm of ague, invaded suddenly and with severity, putting an end to the patient's life in thirty-six hours. Nay, I have known men who were convalescents, attacked unexpectedly with a paroxysm of ague, which has terminated in effusion into the chest, and quickly destroyed the patient." The author next informs us, that one of the most formidable irregularities of this disease was pneumonia. In the preceding sections, he dwells at length on other irregularities, as congestion of blood in the liver and spleen, inflammatory affections of the abdominal viscera and diarrhœa; but he considers pneumonia as a combination with the primary fever, rather than a consequence of it, and proposes venesection as the only remedy, even in advanced stages of the Walcheren fever.

The book concludes with particular dissections, and a general view of the morbid anatomy of the body, a part which is extremely valuable, and arranged with precision and perspicuity. For the convenience of the reader, the whole of the morbid appearances are brought together, and the ravages committed by the fever on the viscera of the head, chest, and abdomen thus presented at one view. This is far too copious for us to make extracts from. We shall, however, observe, that it would have contributed much to the

the completion of this useful book, had a few plates been introduced, illustrative of the morbid anatomy.

It is impossible, in the narrow limits assigned to a review, to enter more fully into the merits of this work. Suffice it here to say, that the fever and its consequences are traced with care and accuracy, that we consider it a valuable acquisition to a medical library, and recommend the perusal of it to our readers. It seems calculated, like the works of Cleghorn and Sir John Pringle, to be particularly worthy the attention of military practitioners. The whole book is interspersed with illustrations, and contains more research than could have been expected in the short time the author has had to compose it.

A new Family Herbal, or Popular Account of the Natures and Properties of the various Plants used in Medicine, Diet, and the Arts. By ROBERT THORNTON, M. D. 8vo. pp. 888. London.

MANY doubts have arisen on the utility of popular works on medicine, and the subject has, at various times, undergone much discussion; yet the question may still be considered as in a great measure undecided. For our own part, we confess, we do not think a science which, of all others, requires the extensive exercise of the highest powers of the mind to attain, and the practical application of which is admitted to be so difficult, can by any possibility be communicated in a compendium. When men who devote their whole lives to the cultivation of medical science, and who possess a fair share of abilities, and who are not deficient in industry and application, so often fail in their attempts to discover the real nature of a disease, and are frequently foiled in their endeavours to remove it, how shall we expect so difficult a task to be accomplished by a superficial acquaintance with a few general rules which are founded in empiricism, and calculated rather to mislead, than to inform those who consult them? While, however, there is such a propensity in mankind to quackery, and the practice of dabbling in medicine is so prevalent, we should be glad to see it productive of the least possible mischief; and surely a step would be gained, if the deleterious metallic poisons, such as calomel and arsenic, were banished from domestic use, and the good Lady Bountifuls were again to be employed in culling simples for possets and sovereign ointments. On this account we congratulate Dr. Thornton on the appearance of his book, which is calculated to inspire in its readers, a taste for botanical pursuits, and to attract their attention to the medical virtues of the vegetable tribes, which have perhaps, especially our own indigenous plants, been too much overlooked and neglected, even by physicians themselves.

The work is dedicated to Dr. Duncan of Edinburgh, and we shall transcribe the following passage in the dedication, as in some degree explanatory of the nature of it, and of the author's plan in the arrangement of his subject.

"A desire

"A desire to become acquainted with the virtues of plants seems to have been coeval with the first dawn of knowledge; but the figures contained in the books treating of these subjects are so inaccurate, and the descriptions so vague, credulous, and, in every sense, so gross and vulgar, that mistakes are unavoidable, and false properties were bestowed on the most common and trivial plants.

"The Medical Botany of the ingenious and able WOODVILLE cleared much rubbish from this Augæan stable, but the expensive mode of its publication deterred many practitioners, and families in general, from the purchase; there was, therefore, wanted for general and ordinary use a companion to your useful and perfect *Pharmacopœia*. Nothing more was required than simply to tread in your foot steps, adding figures by such an artist as Bewick, and correct descriptions, with the addition of some general prescriptions, combining at the same time from all authors whatever related to the subject. This could not be accomplished in a *pharmacopœia*; the present work, therefore, is presented to the world as a more complete and perfect herbal than has hitherto appeared; and as intended to unite the various advantages that have been derived to science from your 'Edinburgh New Dispensatory.' I take this opportunity, therefore, to acknowledge the source of much of my information, which I would not, indeed, disfigure by a change of words, but have generally transcribed from your work, so that considerable part of the merit which may be found in this Herbal must in justice be ascribed to your industry and intelligence; and I hope and trust, that the very superior engravings of Bewick will render it in every respect a useful introduction to Pharmaceutical Science."

Although the Doctor was unwilling to disfigure that portion of information he has transcribed from the Edinburgh Dispensatory, by a change of words, we do not think that enclosing it by inverted commas would have had that effect; and his readers would thereby have been better enabled to distinguish what is his own from what he has derived from that source. In many cases, perhaps in all, as the herbal is intended for a companion to the dispensatory, a reference to the latter book would have been preferable to a long quotation, which when frequently repeated, contributes to swell the volume to rather an enormous size. The same remark applies to the prescriptions, and with redoubled force, since the formulæ are copied from the London Pharmacopœia of 1787, although the new one had appeared some months previous to the publication of Dr. Thornton's book.

The doctor has also added the culinary properties of many vegetables, and has enriched his book with numerous recipes for making wines and other domestic preparations from the various plants he has described, all which cannot fail of being acceptable to the class of readers for whom his work is principally intended: at the same time, it would be injustice to deny, that much valuable information

information on the medical virtues of different substances may be obtained from it by the medical practitioner, who will often see the result of extensive experience, and numerous fair trials, accurately and candidly stated under the respective articles.

We give the following extract as a fair specimen of the plan and execution of the work.

"COMMON MEADOW SAFFRON.

"COLCHICUM AUTUMNALE.

"*Class* VI. Hexandria. *Order* III. Tryginia.

"ESSENT. GEN. CHAR. *Corolla* six-parted: *Tube* radical: *Capsules* connected, inflated.

"SPEC. CHAR. *Leaves* flat, lanceolate, erect.

"DESCRIPTION.—The root is a double succulent bulb. The flower is large, of a purple colour, and comes directly from the root. The leaves appear in spring, and are radical, and spear-shaped. Corolla consisting of a single petal, divided into six lance shaped erect segments. Capsule three-lobed, divided into three cells, containing globular seeds, which are not ripened until the succeeding spring, when the capsule rises above the ground upon a strong peduncle.

"HISTORY.—Meadow saffron is a perennial bulbous-rooted plant, which grows in wet meadows in the temperate countries of Europe. It flowers in the beginning of autumn, at which time the old bulb begins to decay, and a new bulb to be formed. In the following May the new bulb is perfected, and the old one wasted and corrugated. They are dug for medical use in the beginning of summer. The sensible qualities of the fresh root are very various, according to the place of growth, and season of the year. In autumn it is mild; in the beginning of summer, highly acrid; some have found it to be a corrosive poison; others say they have eaten it in considerable quantity without experiencing any effect. When it is possessed of acrimony, this is of the same nature with that of garlic, and is entirely destroyed by drying.

"MEDICAL VIRTUES.—Stoerck, Collin, and Plenk, have celebrated its virtues as a diuretic in hydrothorax and other dropsies. But it is at best a very uncertain remedy. The expressed juice is used in Alsace to destroy vermin in the hair.

"From various observations on the effects of colchicum made by baron Stoerck, and especially upon the infusion of three grains of the fresh root in four ounces of wine, he remarked that its diuretic power was very considerable, and therefore concluded, that if its deleterious acrimony were destroyed, it might prove in this character an efficacious medicine: accordingly, he digested an ounce of the recent root, sliced in a pound of vinegar for forty-eight hours with a gentle heat; the vinegar being then strained, it proved acrid to the taste, constringed and irritated the fauces, and excited a slight cough; to obviate which, he mixed the vinegar with twice its weight of honey, and gently boiled it down to the consistence of honey, forming an oxymel sufficiently grateful; and which,

which, taken in doses of a drachm, promoted a copious discharge of urine, without producing any inconvenience from its acrimony, though it moderately stimulated the fauces, and absterged the mucus. Thus, like the squill, it was found both expectorant and diuretic; and the successful use of this medicine, in various hydropic disorders in the hospital at Vienna, equalled the baron's utmost expectations. He recommends, at first, a drachm of the oxymel to be given twice a day in any suitable vehicle, and gradually to increase the dose to an ounce or more in a day. Many other practitioners, who employed the oxymel colchici in these complaints, also experienced its good effects, especially in Germany and France, where it continues to be a favourite medicine: in England, however, the colchicum has been less successful, and is very generally thought a less efficacious diuretic than the squill, which excels it still more as an expectorant. The London College, conformably to the practice of Stoerck, directs an oxymel colchici, and that of Edinburgh a syrup; the latter, however, differs from the former only in using sugar instead of honey.

" Preparation.—Syrup of Colchicum. (Syrupus Colchici Autumnalis. E.)

" Take of colchicum root, fresh, cut into thin slices, one ounce; vinegar, sixteen ounces; double refined sugar, twenty-six ounces: Macerate the root in the vinegar two days, occasionally shaking the vessel; then strain the infusion with gentle expression. To the strained infusion add the sugar, and boil a little, so as to form a syrup.

This syrup seems to be the best preparation of the colchicum. We must take care to gather this root in the proper season; and from [to] errors in this particular we are to ascribe the uncertainty in the effects of this medicine as found in the shops. It is chiefly employed as a diuretic, and may be taken from a drachm or two to the extent of an ounce, or more.

" Oxymel of Meadow Saffron. (Oxymel Colchici. L. D.)

" Take of the fresh root of meadow saffron, cut into thin slices, one ounce; distilled vinegar, one pint; clarified honey, two pounds by weight. Macerate the root of meadow saffron with the vinegar in a glass vessel, with a gentle heat, for forty-eight hours. Strain the liquor, pressed out strongly from the root, and add the honey. Lastly, boil the mixture, frequently stirring it with a wooden spoon, to the thickness of a syrup. This is an active preparation, but its use may be entirely superseded by the syrup of the same root. The dose given is a drachm to half an ounce."

Every plant described is accompanied by an engraving; these, as may be expected, in so numerous a list, are of unequal value, some very accurately representing the plant for which it is designed, and others being not quite so fortunate. The articles follow according to their botanical arrangement, and the want of an index is much felt, for he who wishes to see the description of any paticular plant, and is unacquainted with its class and order, has no other

other resource but the running title to guide him in his search; this is certainly no small inconvenience in consulting a bulky volume like the present one. It is not our intention to search for and detail little errors and inaccuracies, for such must occur in every book of considerable size, but we certainly were a little surprised by the Doctor's remark, (p. 20.) that Turner's Cerate received its appellation because it is used in curing *the wounds of turners;* we had always thought it derived its name from the Inventor, who first recommended it as possessing very healing qualities, on which account it was adopted by the London College, under the title of Ceratum Epouloticum. We do not however often meet with similar errors, and are persuaded this must have escaped the author's notice.

We shall here finish our few remarks upon Dr. Thornton's work, and we hope they will be received in the same spirit in which they were written, as hints for the improvement of a future edition, which we have no doubt it will speedily attain; and we flatter ourselves that the author will coincide with us in opinion, that the book would not be injured, but rather improved by a careful and judicious curtailment, as well as a proper Index.

Edinburgh Journal. No. XXII.

Article 1.—*Observations on the Digestion of the Stomach after Death.* By Allan Burns, Member of the Royal College of Surgeons in London, and Lecturer on Anatomy and Surgery in Glasgow.

Mr. Burns observes, that in dead bodies, the stomach has repeatedly been found eroded, where the previous symptoms gave no reason to suspect such an occurrence. This has been attributed by Mr. Hunter, to the action of the gastric juice, and Mr. Burns agrees with him in this opinion. Mr. Hunter, however, thought that the gastric juice, which was already poured into the stomach, effected this change. Mr. Burns seems to think differently, and states several cases wherein erosion had taken place at parts of the stomach, which could not have been acted upon after death by the contents of the stomach, and therefore that some other cause must be sought for.

He thus sums up his opinion: "If, then, the stomach was not acted on by fluid contained in its cavity, how came it to be dissolved? To me it appears, that we cannot, with propriety, ascribe the digestion of the stomach, in every case, to the gastric juice which has been poured into the cavity of that viscus. We are more properly to refer it, in some instances, to the action of the gastric fluid retained in the vessels which had secreted it. If this be admitted to be a correct explanation of the fact, that the fore-part of the stomach is sometimes digested by the gastric juice, we shall cease to have any difficulty in accounting for the dissolution of other parts of this viscus, besides the large end. We shall learn, that the part acted on must vary, according to the place of the stomach

where

where the gastric juice is retained in the apparatus which secreted it, and thus we shall be enabled to explain some cases, which, at present, seem to be in opposition to the observations of Mr. Hunter."

The author states some points, in difference between Dr. Adams and himself, upon this subject, who, he imagines, has mis-apprehended Mr. Hunter's opinion as to the state of previous health or disease, in which this erosion of the stomach could take place. It is superfluous for us to enter into this question, we shall refer our readers to a paper contained in a former part of this number, wherein Dr. Adams has entered pretty fully into the merits of it, and defended the statement he had given of Mr. Hunter's opinions. We shall only observe in conclusion, that we do not exactly coincide with the author in opinion, that "poison has been called in to account for the appearance; and thus the life of the person supposed to have administered the deleterious substance might, it is evident, be brought into danger."

We think there is not any medical practitioner, who would in a judicial investigation, attribute erosion of the coats of the stomach to poison, unless it was accompanied by evident marks of previous inflammation, or with gangrenous appearances; perhaps, in such serious circumstances, he would not positively affirm it without discovering some of the deleterious substance among the contents of that viscus.

ARTICLE 2.—*Regulations with regard to the passing of Conscripts for the French Army.*—Extracted from the Code de la Conscription.

IN France, there is not that discretionary power vested in the military surgeons, which exists in this country, of determining on the ability or disability for duty of individuals liable to military service; the regulations on this head, enacted by the government, are minute, and the execution of them are entrusted to the municipal and central administrations, who are to decide on the validity of the surgeon's opinions, and even the examinations of the conscript, are to be made in the presence of the administration, or if the conscript is unable to attend the Board, in that of a delegate from it. "Officers of health, and others convicted of having given a false certificate of infirmities or inabilities, or of having received presents or gratifications, shall be punished by not less than one, or more than two years imprisonment, or by fine, not less than 300, or more than 1000 francs."

The regulations by which the officers are to be governed in their opinions, are contained in two tables; the first, contains a list of "evident infirmities, implying absolute incapability;" the second is entitled "infirmities or diseases which occasion absolute or relative incapability for military service, and which are reserved for the examination and opinion of the central administrations of the department." Some of these infirmities, only entitle to a provisional exemption, and every care seems taken to guard against abuses of indulgence.

The

The following passage will convey an idea of the rigid rules which are observed in the examination of conscripts.

"We know that young people in the country are more subject to those affections, (rheumatic) than those in towns, and that in some kind of abodes, they are more easily contracted. Joining all these data, combining and comparing them together, the surgeons may commonly distinguish a real affection from a feigned one. As it is but just that, in some other equivocal cases, such as those respecting the diseases of the breast, humanity should incline to the conscript's side; so, with respect to pains and rheumatisms, which are not proven, it is equally proper to prefer severity to indulgence, as military exercise, far from aggravating this predisposition, if it exist, will only contribute to remove it."

ARTICLE 5.—*Letter from Professor E. M. of Rosenschoeld, of the University of Lund, in Sweden*, to C. CHISHOLM, M. D. F. R. S. &c. Communicated by Dr. Chisholm.

IN a former Journal, p. 160, we gave an account of a paper on the Lues Bovilla, by Dr. Chisholm, to which this may be considered as a supplement. It consists of certain questions, addressed by him to Dr. Florman, Professor of Anatomy in the University of Lund, in Sweden, together with the Professor's Answers. Dr. Florman himself has never seen this disease, it not having occurred in Sweden since the year 1766, nor in Denmark since 1772; "but to judge from the best Swedish and Danish descriptions of the disease, it comes nearest to the Pestis Bovilla of Lancisci, and to the Lues Bovina described by Ramazzini and Camper." The pustular eruption, however, has not been a constant symptom in those northern climates, but more frequently wanting. Although the pestis bovilla has not appeared in Sweden for so long a period, a disease somewhat similar frequently occurs, which the author describes as a malign fever, united with anthrax, which most often kills before the third day. He says, "this disease is very different from the genuine pestis bovilla, and I have never seen or heard of the latter arising from the former. It prevails in the warmer summer months, and ceases of itself in the autumn or sooner." It seems to depend upon local circumstances, and arises in some places without having been brought to them by contagion. Having in our former remarks pretty fully considered Dr. C's opinions, we have little to add. We think, however, that the inference drawn by Dr. Chisholm, of the identity of the pestis bovilla in Europe, with the disease that prevailed in Grenada in 1783, requires further support to establish it completely. No circumstance is more worthy of remark, than that although such deleterious and fatal effects arise in the intertropical climates, from eating, or even handling the flesh of animals dying of the disease, no such effects take place in Europe in the true pestis bovilla, where the disease is entirely confined to a single species of animal, while yet the malign fever with anthrax in Sweden, frequently attacks at the same time horned cattle and horses, nay, also the human species: this was precisely the case when

when the cynanche maligna raged at Grenada in 1783, for Dr. C. does not fail to remark its concomitancy with a contagious distemper epidemic among the cattle and mules in the same parts of the island where the cynanche maligna appeared.

We subjoin the following quotation on the subject, of the resemblance of the pestis bovilla with the small-pox.

" *Q. 5th.* Are there any good reasons for believing, that the Pestis Bovilla partakes of the nature of variola or small-pox; and that the disease may be communicated like it by inoculation? And have any attempts been made in Sweden or Denmark to ascertain this?

" *A.* I cannot find that the true Pestis Bovilla corresponds with variola in mankind. At least, the elevated pustule ought to be, in that case, a more constant and general symptom of this plague. It can, nevertheless, as other contagious complaints, be propagated by inoculation, of which we have a number of examples, as well in Holland as in Denmark, where many of the inoculated cattle had recovered, and since not been contaminated by other sick cattle. For the inoculation has commonly been used the matter which discharges from the nose of the sick cattle."

ARTICLE 4.—*Case of disordered Alimentary Canal, supposed to have arisen from the Person swallowing a Skein of Cotton several Years before.* By Mr. FINCHAM.

A lady of 25, accidentally swallowed a skein of cotton; no inconvenience was felt for three months, when upon being electrified, she was seized with violent pain in the stomach, without sickness; the pain returned every day for some months. From a friend's only requiring her to take food, says the author, she became sick, and vomitted the cotton, which, from being white, had acquired a permanent green colour, but was little changed in texture; much general indisposition remained for seven or eight months, but she afterwards enjoyed good health.

Then follows a diary of the symptoms and mode of treatment of a case of constipation, in which we can trace no connexion with the skein of cotton that had been previously swallowed, but in which we clearly perceive the beneficial effects of the purgative plan of treatment carried to some extent, as recommended by Dr. Hamilton. " May 17. The bowels were relieved in the night of the 15th and yesterday morning, of hardened fæces to a prodigious amount." Blister after blister was applied to the stomach, and small doses of calomel (that modern panacea) with hyoscyamus, were given in pills; it was only, however, by repeated purgatives, that relief was afforded and amendment produced. "23d, a senna mixture was substituted for the pills." " 25th, did not begin the mixture till noon yesterday. She has had three copious evacuations, the first extremely offensive. This operation has produced considerable amendment." It is unnecessary to detail the remainder of the case, as it consists of similar reports; amendment when the bowels were kept free, and, as might be expected, aggravation of the symptoms when this was at any time neglected.

ARTICLE

ARTICLE 5.—*On the Treatment of Ganglia by Escharotics.* By JAMES WOODHAM.

"GANGLIA, says the author, though not frequent, are far from being uncommon; and as they always prove inconvenient to the patient, and sometimes troublesome to the surgeon, under the means usually employed for their removal, the annexed cases, treated successfully by a mode somewhat novel, will not, I trust, be unacceptable to the profession."

Two cases are given, in which the treatment consists in applying a blister to the tumour, removing the detached cuticle, and plentifully sprinkling the cutis with the oxyd of arsenic in powder, and repeating this every day, till a complete eschar was formed. To procure a separation of the eschar, and to remove the inflammation that had been excited, an emollient poultice was applied morning and evening. In ten days the eschar was completely formed, in a fortnight it was thrown off, leaving a healthy ulcer the size of a shilling, which was daily dressed with an ointment of wax and oil, occasionally sprinkling it with nitric oxyd of quicksilver. The whole process of cure took up in each case, something less than three months.

ARTICLE 6.—*Observations upon Ulcers of the Leg.* By JOHN WEBB, Surgeon.

THE author has in this paper presented to us some observations, with an attempt to explain the principle which should be kept in view in the treatment of the irritable ulcer. The worst cases, he says, which have come under his care, have been attended with the following character; "the constitution is affected with debility; the digestive powers are impaired; the function of the liver is diseased; the circulation is hurried; an anxious watchfulness is depicted upon the countenance; and, from the general irritability which pervades the whole constitution, the patient is seldom relieved by the soothing tranquillity of sleep." His peculiar treatment we shall give in his own words.

"The motives which induced me to depart from the regular routine of practice, were from a case where every known application had been tried, without procuring the wished for effect. Here the constitution was greatly disordered. In this case, the applications which alleviated the sufferings of the patient most, were fomentations and poultices. Seeing the sufferings of the patient were quelled for a certain time, I was led to consider why the poultice should act thus beneficially for *a time*, and no longer, and this whether the application was warm or cold. The conclusions which I drew, were, that the *secreted pus* must act as an irritating cause, and the patient was easy as long as the poultice *absorbed the secreted pus*, and kept the surface of the sore clean, and not from the sedative effect of the application, as is generally supposed. The next visit, I dressed the ulcer with two folds of dry lint, over which linen was to be kept wet, with an evaporating lotion, to allay the surrounding inflammation,

inflammation, and keep the edges of the lint from adhering to the sides of the ulcer, which was to be removed immediately when the patient experienced any pain, and fresh dressings to be substituted. The success which attended this practice, surpassed my most sanguine expectations. In the short space of ten days, an immense chasm was filled with strong healthy granulations; the edges under this treatment were kindly cicatrizing; a diseased constitution was rapidly restored."

(To be Continued.)

Report of the Diseases of Edinburgh for March, 1810.
By John Roberton, M. D.

The weather, on the commencement of the month, was for some days cloudy, and we had several showers of rain. In addition to this state of the weather, we had, till the middle of the month, occasional falls of snow, with some intervening clear days. The weather then became pleasant, and continued so till within a few days of the termination of the month, when it again became cloudy, and so continued till the end.

The Barometer continued rather low during the whole month.

The Thermometer stood about 40, or between that and 35 during most part of the month. Toward the end, however, it was sometimes as high as 55.

The diseases which have been most common were chin-cough, some cases of measles, inflammatory complaints in general, severe cases of diarrhœa, often attended with an affection of the stomach, chronic catarrh, and fevers of various degrees of violence; some of them of a bad kind, running their course in a few days, while, in many instances, some were protracted a very long time.

Chin-cough has greatly increased since last Report, both in extent and in severity. There are parts of the City so completely infested by it, that almost every infant has been affected by that distressing malady. In the present, as in most instances of contagious disease, I have been at some trouble in endeavouring to trace the place where it first originated. The result of my investigations on this subject, I have detailed in my lately published work on Medical Police, &c. &c.; therefore I shall not now dwell upon it. I have in these investigations always found that those diseases originated in low ill-aired places, and, in the present instance, have traced it to Canal Street, situate on the banks of the remaining marshes of the North Loch. This nuisance, though much diminished of late years, still con-

tinues to vitiate the surrounding atmosphere, and with the assistance of the putridity generated in the shambles, almost immediately in the same neighbourhood, probably gave rise to the disease. This method of attempting to account for the generation and propagation of these always distressing, and too often fatal diseases, carries with it proofs of a seemingly incontrovertible kind. It teaches us that cleanliness ought not only to be considered as an ornament to our persons, but highly beneficial; not only in the prolongation of our lives, but also of those who, although at some distance from such places, may have their health injured by their existence.

The measles have not increased either in extent or severity since last month, neither do they seem to have abated, as in various families the disease is to be found.

Although inflammatory complaints have neither been so general nor so severe during the winter, as in almost every previous year, yet there has constantly existed a sort of inflammatory diathesis, which from time to time has appeared in various forms, and under various states of severity. Indeed, although none of these inflammatory affections have individually been very widely diffused; yet there is, perhaps, scarcely one variety of them in the whole of Cullen's arrangement, but has been met with. Thus it would appear, that what we have gained by their severity being less conspicuous and less fatal, we have lost by the number of such affections being increased, and consequently, by the general state of health being more widely disordered.

There have appeared some very severe cases of diarrhœa, of a degree of obstinacy much beyond what we usually meet with in practice. Although many cases of this disease seemed to owe their existence principally to a disordered state of the intestinal canal, independently of any affection of the stomach, yet in a great variety of instances, it was accompanied by an evident affection of that organ. In the first, purgative medicines alone, with, in a few instances, the use of the warm bath, entirely removed them. But in the other, which was often accompanied by severe head-ach, pain of stomach, with frequent and severe sickness and violent retching, the practice necessary for their removal required much greater discrimination. In many of them purgatives were, on their administration, instantly vomited, and this often gave increase to the retching, which before was much less violent. On such occasions too the pain of head and stomach exceeded any thing that can be described. In these cases, although pain in the head

head was certainly only a consequence of the affection of the stomach, I have found it necessary, even for momentary relief, to apply leeches to the temples, and even in some cases to open the jugular vein or temporal artery. After this, or at the same instant, to apply a large blister over or even beyond the whole surface occupied by the stomach. I have found this practice, even previous to the use of any internal medicine, permit us to administer such medicines; and such practice, ultimately effected a perfect cure. In others, however, the stomach has continued so irritable, that unless purgatives were, at every dose, accompanied by a small proportion of extract of hyosciamus, they were instantly vomited. In addition to all these plans of practice I have, in some cases, found it absolutely necessary to order an anodyne glyster. By patient perseverance in one or more of these methods of cure, according to the severity of the case, they have all yielded, and the patient's health has been ultimately restored.

I have frequently had occasion to take notice of a sort of chronic catarrh, very common, I believe, throughout most of the British Empire. It is usually the sequela of ill-treated or neglected catarrh, when it appears in its acute state. And not uncommonly, without being preceded by acute catarrh, it affects old and debilitated persons, and proves, especially in the morning, exceedingly troublesome to them. This, from either of these causes, is not an easily cured affection, but it may in almost every instance be greatly relieved. In my former reports, as well as in my treatise on Medical Police, there will be found a full account of this disease, and of the means which, in many instances, I have found best calculated for the alleviation of its symptoms.

Fevers still of the typhöid kind, prevail rather extensively. Some of them are much worse than others, and run their course much more rapidly. In various instances they have, independently of every attention, terminated fatally in a few days, while in others, much more numerous than these mentioned, their course seems to be protracted often for several weeks, nor do such cases seem to terminate so fatally as the former. To prevent disease ought always to be our first object, and to cure it our next. More attention being paid to the first of these than is usually done, would soon render the necessity of attention to the second much less. In no disease can this observation be more justly applied than to the various kinds of febrile diseases, and in none has it been less attended to.

Princes Street,

An

An Account of Diseases in an Eastern District of London, from March 20 to April 20, 1810.

ACUTE DISEASES.	
Peripneumonia Notha	3
Febris Lenta - - - - -	2
Hæmoptysis - - - - -	4
Catarrhus - - - - - -	6
Rheumatismus Acutus - -	3
CHRONIC DISEASES.	
Tussis - - - - - - - -	15
Tussis cum Dyspnœa -	13
Phthisis Pulmonalis - -	2
Pleurodyne - - - - -	8.
Hæmoptysis - - - - -	5
Hysteria - - - - - -	4
Cephalæa - - - - - -	7
Paralysis - - - - - -	3
Obstipatio - - - - - -	5
Hernia - - - - - - -	1
Hæmorrhois - - - - -	1
Rheumatismus Chronicus	12
INFANTILE DISEASES.	
Aphthæ - - - - - -	3
Ophthalmia - - - - -	2
Diarrhœa - - - - - -	5
Vermes - - - - - - -	4
Scrophula - - - - - -	4
PUERPERAL DISEASES.	
Menorrhagia Lochialis -	9
Dolores Post Partum -	4
Dysuria - - - - - - -	5
Hæmorrhois - - - - -	3
Mastodynia - - - - -	4

The long continuance of the cold weather, with the prevalence of East and North-East winds, has protracted the duration of those complaints which occur principally in the winter season.

We have therefore upon our list a large number of the same diseases as those which we have for some time announced. The connection of hæmoptysis with other affections of the lungs, and which we hinted at in a former report, still continues. In some of those cases, in which it before occurred, it has returned with increased violence; and in addition to these, fresh instances have appeared. This symptom appeared in an elderly subject during an attack of peripneumonia notha, and has returned at intervals for a considerable time since the termination of the original disease.

Rheumatic affections have lately appeared in a variety of forms. These might indeed be expected as the consequence of the late variable weather. The bright appearance of some mornings would naturally induce even valetudinarians to quit their home, and to enjoy the freshness of the air, and the beauty of the scene, inattentive to the inconvenience they might feel from the cool temperature of the atmosphere around them.

Meteoro-

Meteorological Diary, kept at Clapton, Hackney, from Feb. 26, *to March* 27, 1810, *by* THOMAS FOSTER, Esq.

Day of M.		Thermom Max.	Thermom Min.	Barometer Max.	Barometer Min.	Wind.	Weather.
Feb. ☾	26	48°	45°	29 90	29 77	W.	Sun & clouds. Cloudy night
	27	54	37	30 07	29 72	S. W.—W	Misty & sm. rain, *am.* Fine *p m*
	28	54	47	30 07	29 90	W.	Sun and clouds
March	1	55	48	29 83	29 72	W S. W.	Misty *a. m.* Sun & clouds *p. m.*
	2	54	45	29 73	29 65	S. W.	Overcast & misty. Rainy nig.
	3	53	33	29 70	29 57	W.	Foggy—rain—clear
	4	49	40	29 59	29 30	S.	Fog—sun & clouds—rain
1 ● 23′	5	46	32	29 30	28 95	N.	Cloudy—sun & clouds
	6	39	35	29	28 94	N. W. S. E.	Snow, *a. m.* Clouds—clear
	7	45	38	28 99	28 85	S. E.	Rain, *a. m.* Clouds, *p. m.*
	8	51	45	29 17	29 07	S.	Sun & showers. Clear night
	9	57	50	29 33	29 17	S W.	Sun & showers. Windy night
	10	58	46	29 89	29 15	W.	Sun & clouds. Clear, *p. m.*
	11	57	50	29 9	29 70	S. W.	Clouds. Rainy night
14 ☽ 47′	12	57	37	30 04	29 68	S. W.	Clouds & rain, *a. m.* Fair, *p. m.*
	13	43	37	30 02	30 02	N. E.	Cloudy
	14	41	31½	30 03	29 89	N. E.	Fair day
	15	36	32	29 85	29 58	S. E.	Cloudy
	16	39	32½	29 67	29 58	N. E.—E.	Fair morning. Cloudy night
	17	41	27	29 93	29 70	N. E.	Fair
	18	40	24	30 02	29 93	N. E.–S. E.	Fair
	19	48	31	30 10	30 07	W.—N.	Fair
14 ○ 31′	20	52	31	29 98	29 78	N. W.	Fair
	21	50	35	29 97	29 74	W. N. W.	Fair
	22	42	24	29 98	29 97	N.	Fair
	23	49	25	29 98	29 80	S.—N.	Fair
	24	46	35	29 83	29 80	E.	Fair, and strong wind
	25	40	31	29 96	29 84	E.	Fine windy day
	26	40	34	29 95	29 80	E. S. E.	Clear windy day

THERMOMETER.

Highest, March 10 — 58°
Lowest, March 22 — 24°
Mean of Observations for this period - 42°

BAROMETER.

Highest, Feb. 28 — 30.07
Lowest, March 7 — 28.85
Mean of Observations for this period - 29.69

OBSERVATIONS.

Feb. 26. *Cirro-Cumuli* observed in the morning.
28. *Cirro-Stratus* observed in the west.

Mar. 3. Remarkably fine golden coloured sun-set.
5. Four different modifications of clouds seen at once, namely *Cirrus, Cirro-Cumulus, Cirro-Stratus,* and *Cumulus*; succeeded by rain during the night.
10. The Bat, *Vespertilio Murina,* first seen this year.
14. A lunar halo, about 40 deg. in diameter, seen from 8 till 12 o'clock.
24. The modification of *Cirrus* observable; these clouds, called by the country people *Mare's Tails,* usually precede high wind.
25. High wind all day, *Cirrus* still observable.

INTELLIGENCE.

THE late Army Medical Board, as was generally expected, has been dissolved, and a new one appointed, consisting of Mr. Weir, Drs. Kerr and Theodore Gordon. This arrangement seems to be no ways pleasing to Sir Lucas Pepys, from whom it has called forth the following letter, which we present to our readers, as a specimen of the *Zeal and Ardour* with which Sir Lucas contends for the exclusive appointment of the medical graduates of Oxford and Cambridge to the Army, whom, with no great degree of liberality, he designates as the *only regular physicians*, although he acknowledges those Universities are not medical schools. The Secretary at War would not say whether he thought a *previous* academical education is necessary or adviseable, *before* the commencement of medical studies. It cannot be necessary to the welfare of the army, if medical knowledge cannot be attained by it.

On the late establishment, all the physicians to the army were obliged to be examined by the College, of which Sir Lucas is president; no one, therefore could be approved, who was not *qualified* to undertake the care of diseases; and of what consequence could *it* be to the sick soldier, whether the physician who cured him, was or was not a Fellow of the College? In point of general literature, which is confessedly so ornamental to a physician, we think there are few graduates of Edinburgh who could not, at least, *equal* Sir Lucas's Letter in elegance of diction and perspicuity of style, although he had never resided in an English University, an advantage Sir Lucas so exultingly boasts of.

Copy of a Letter from the Physician General to the Secretary at War.

"MY LORD,

"Cambridge, Oxford, and Dublin Universities will have to lament your Lordship's acquiescence in the lessening of the credit and character of one of the learned professions. The regular physicians from those Universities were gradually getting into the charge of the army! This I have been bringing about for the last 16 years; and when I first came into the army, there was only one regularly educated physician in it. Now there are five Fellows of the College of Physicians, and only two out of the whole number who have not been approved by the College. The Board about to be established under your Lordship's sanction, propose to have the care of the army committed entirely to regimental surgeons. Whether your Lordship was of opinion, that previous academical education is necessary, or adviseable, before the study of medicine in the medical schools, either here or at Edinburgh, I wished to know when I had the honour of waiting upon your Lordship lately; but as I found you declined to enter on the subject, I thought it my duty, as President of the College of Physicians, and well known by the Universities as a zealous advocate for academical education, to trouble your Lordship with this, that it might hereafter be known that I had expressed my opinion in writing on this important subject,

ject. A Board of General Officers determining on the medical arrangements of the army, is not* more incompetent than a College of Physicians to decide on the attack of a fortress. As the Commander in Chief disavows the intended change, as originating with him, your Lordship will see the propriety of my addressing you, before it is too late, to request that the abolition of regularly educated physicians from the army may be well considered by your Lordship. For this purpose, I hope my paper delivered to Mr. Percival, on the subject of the fifth Report, two years ago, has been read by your Lordship, and also the Appendix, No. 8, B 4 and 5, of Mr. Keates's printed Observations, where your Lordship will see the consequence when surgeons, called physicians, but really not so, act as physicians. I can have no other inducement in troubling your Lordship with this, but my attachment to the Universities, and a sincere wish for the welfare of the army.

"L. PEPYS.

"Upper Brook Street, Jan. 28, 1810."

Mr. LUKE HOWARD, of Plaistow, has detected a criminal imposition, the knowledge of which cannot be too widely circulated, or its effects too carefully guarded against. A very large quantity of glass of lead, has, by some means, found its way into the London market, as glass of antimony. This imposition is sure to be discovered in the operation to which the latter is chiefly applied, the making of emetic tartar; but it is highly necessary for the consumers of smaller quantities, as in the *vitrum ceratum* and *vitrum antimonii*, to be acquainted with the following distinctive characters of the two, that those who have bought the article within the last twelve or eighteen months, may assure themselves of its being genuine. The public health, and even the lives of many patients, may be considered at stake on this occasion. Glass of antimony has a rich brown, or reddish colour, with the usual transparency of coloured glasses. The glass of lead is of a deeper and duller colour against the light, is much less transparent, and even in some samples quite opaque. The specific gravity of the true, never exceeds 4·95, that of the spurious is 6·95: or in round numbers their comparative weights are as 5 to 7. Let twenty grains be rubbed fine in a glass mortar, adding half an ounce of good muriatic acid. The true dissolves with an hepatic smell; the solution is turbid, but has no sediment. The spurious turns the acid yellow, giving out an oxymuriatic odor, and leaves much sediment. Let a little of each solution be separately dropped into water. The true deposits oxyde of antimony, in a copious white coagulum; or, if the water has been previously tinged with sulphuret of ammonia, in a fine orange precipitate. The spurious gives no precipitate in water, and in the other liquid, one of dark brown, or olive colour. A solution of the spurious in vinegar has a sweet taste, together with the other properties of acetate of lead. A very small mixture of

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* We presume Sir Lucas means less incompetent.

of it may be detected, by its debasing, more or less, the bright orange colour of the precipitate thrown down by sulphuret of ammonia, from the solution in any acid. The samples of the spurious hitherto detected are of a much thicker and clumsier cast than the genuine; but the appearance is not to be trusted, and no specimen should be allowed to pass without a trial, either of the specific gravity, or chemical properties.

On an examination after death of the man who was wounded on Tower Hill, by the soldiers on the 9th ult. and carried into the London Hospital, it was discovered that the ball had entered the fore part of the neck, had detached one of the alæ of the thyroid cartilage, passed clear of the carotid artery, and wounded the vertebral; it had afterwards fractured the transverse process of one of the cervical vertebræ, and finally lodged under the integuments at the back part of the neck. The poor man survived only three days.

Dr. ADAMS's Lectures on Pathology and the Practice of Medicine, will commence on the 27th inst. at ten o'clock in the morning. —During that part of the Course which embraces Morbid Poisons, all the varieties of Vaccination and Small-pox, casual and inoculated, will be exhibited at the Hospitals.

Dr. CLUTTERBUCK will begin his Summer Course of Lectures on the Theory and Practice of Physic, Materia Medica, and Chemistry, on Monday June the 4th, at a quarter before ten in the morning, at his house, No. 1, Crescent, New Bridge Street, where further particulars may be had.

Dr. JAMES ROBERTON, Member of the College of Physicians, and one of the Physicians to the British Lying-in Hospital, will begin his Summer Course of Lectures on the Principles and Practice of Midwifery, and the Diseases of Women and Children, about the 15th of May.—The Lectures will be delivered every morning, at Mr. Bell's Museum, No. 10, Leicester Street, Leicester Square.

We understand that Mr. RAMSDEN is about to publish some important Cases of Cure of the derangements of the Testicle, demonstrative of their being sympathetic with the Urethra; and to shew that most of the Diseases of that Gland, hitherto deemed incurable, are perfectly within remedy. Also some Cases of Hydrocele, in which the radical Cure has been effected without recourse to any of the operations at present practised for that purpose.

To CORRESPONDENTS.

We would very readily have afforded a place to any recital of facts an *Impartial Practitioner* might have sent us, on the subject of Vaccination, whichever side of the question they might have tended to support; but we cannot spare room for long declamatory arguments. If this Practitioner really doubts the occasional occurrence of Small-pox a second time, and gives such easy credence to erroneous statements against vaccination, as he appears by his Letter to do, we fear his bias to one side of the question is too great to entitle him to the character of *Impartiality*.

ERRATA.

In the paging of the first Sheet of this Number, for 373—388, read 353—368.